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Georgia Power

2021 Annual Groundwater Monitoring and Corrective Action Report

Plant Yates AP-3, A, B, B', and R6 CCR Landfill
Newnan, Georgia

January 31, 2022

2021 Annual Groundwater Monitoring and Corrective Action Report

Plant Yates – AP-3, A, B, B', and R6 CCR Landfill
Newman, Georgia

January 31, 2022

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Summary

This summary of the 2021 Annual Monitoring and Corrective Action Report provides the status of the groundwater monitoring and corrective action program in 2021 at Georgia Power Company's (Georgia Power's) Plant Yates Ash Ponds (AP) AP-3, A, B, B', and the R6 Landfill (the site). This summary was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Georgia Power to meet the requirements listed in Part A, Section 6[1] of the United States 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 has historically been transferred and stored at the site. The site is located on the southwestern portion of the Plant Yates property.

Plant Yates and the site

Groundwater at the site is monitored using a comprehensive multi-unit monitoring system of wells installed to meet federal and state monitoring requirements. Routine sampling and reporting began in 2017 after the completion of eight background sampling events. Based on groundwater conditions at the site, an assessment monitoring program was established on January 14, 2018 at AP-3, B, and B'; in September 2019 for AP-A; and on November 13, 2019 for the R6 Landfill. An assessment of corrective measures (ACM) was initiated on February 12, 2019 for the AP-3, B, and B' units. AP-A was added to the ACM on June 12, 2019, and the R6 CCR Landfill was incorporated on January 31, 2020. During the 2021 annual reporting period, the site remained in assessment monitoring as corrective measures are being evaluated.

During the 2021 reporting period, Arcadis conducted three groundwater sampling events: an initial assessment event in February, as well as two semiannual events in March and August/September. Groundwater samples were submitted to Pace Analytical Services, LLC, for analysis. Per the CCR Rule, groundwater results for March and August/September 2021, were evaluated in accordance with the certified statistical methods. That evaluation

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

showed statistically significant values of Appendix III[2] and Appendix IV[3] parameters[4] in the wells identified in the following table.

Appendix III Parameter	March 2021	August/September 2021
Boron	YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43	YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43
Calcium	YGWC-38, YGWC-42	YGWC-38, YGWC-42
Chloride	YGWC-24SA	YGWC-24SA
pH	YGWC-41	--
Sulfate	YGWC-38, YGWC-42, YGWC-43	YGWC-38, YGWC-42
Total Dissolved Solids	YGWC-38, YGWC-41, YGWC-42, YGWC-43	YGWC-38, YGWC-41, YGWC-42
Appendix IV Parameter[4]	**March 2021**	**August/September 2021**
Beryllium	*Federal and State:* YGWC-38	*Federal and State:* YGWC-38
Lithium	--	*State:* YGWC-42
Selenium	*Federal and State:* YGWC-38, PZ-37	*Federal and State:* YGWC-38, PZ-37

The beryllium statistically significant level (SSL) at well YGWC-38 is horizontally delineated by downgradient wells PZ-37 and YGWC-23S. Beryllium SSL at well YGWC-38 is vertically delineated by well YAMW-5. The selenium SSL at well YGWC-38 is horizontally delineated by downgradient wells YGWC-23S and YGWC-36A, and vertically by recently installed PZ-52D. Lithium is spatially delineated by PZ-51 and YGWC-43; however, the current Appendix IV data set for these wells is limited to less than four independent sampling events which is the required minimum number to construct confidence intervals to statistically evaluate the results with respect to the groundwater protection standard. Georgia Power will continue to monitor these wells until an adequately sized data set is available to complete statistical analyses.

Based on review of the Appendix III and Appendix IV statistical results for the groundwater monitoring and corrective action program from January through December 2021, the site will continue in assessment monitoring. Georgia Power will continue routine groundwater monitoring and reporting for the site. Reports will be posted to the website and provided to the Georgia Environmental Protection Division (GAEPD) semiannually.

[2] Boron, calcium, chloride, fluoride, pH, sulfate, and total dissolved solids (TDS).
[3] Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, fluoride, lead, lithium, mercury, molybdenum, selenium, thallium, and radium 226 + 228
[4] A state statistically significant level SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, or the calculated background interwell prediction limit. A federal SSL-related constituent is determined by comparing the confidence intervals developed to either the constituent's MCL, if available, the USEPA RSL, if no MCL is available, or the calculated background interwell prediction limit.

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Acronyms and Abbreviations

ACC	Atlantic Coast Consulting, Inc.
ACM	Assessment of Corrective Measures
AP	Plant Yates Ash Pond
Arcadis	Arcadis U.S., Inc.
CCR	Coal Combustion Residuals
CCR units	the combined monitoring systems of AP-3, A, B, and B' and the R6 Landfill
CFR	Code of Federal Regulations
GAEPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
GWPS	Groundwater Protection Standard
MCL	maximum contaminant level
MDL	method detection limit
mg/L	milligrams per liter
QA/QC	quality assurance/quality control
SSI	statistically significant increase
SSL	statistically significant level
USEPA	United States Environmental Protection Agency

Professional Certification

This 2021 Annual Groundwater Monitoring and Corrective Action Report for the Georgia Power Company Plant Yates AP-3, A, B, B', and R6 CCR Landfill has been prepared in compliance with the United States Environmental Protection Agency Coal Combustion Residual Rule (40 Code of Federal Regulations 257 Subpart D) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10 by a qualified groundwater scientist or engineer with Arcadis U.S., Inc.

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1 Introduction

This 2021 Annual Groundwater Monitoring and Corrective Action Report describes groundwater monitoring activities conducted at the Georgia Power Company (Georgia Power) Plant Yates Ash Ponds (AP) AP-3, A, B, B', and R6 Landfill (the site) in February, March, and August/September 2021. This report was prepared in accordance with the United States Environmental Protection Agency (USEPA) Coal Combustion Residuals (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D) and the Georgia Environmental Protection Division (GAEPD) Rules for Solid Waste Management 391-3-4-.10. Groundwater monitoring requirements for the site are specified by GAEPD Rule 391-3-4-.10(6)(a), which also incorporates the USEPA CCR Rule. For ease of reference, the USEPA CCR Rule is cited within this report.

This report presents the results of February 2021 annual monitoring for Appendix IV parameters of 40 CFR 257, two semiannual monitoring events conducted in March and August/September 2021, and activities completed through December 2021 in accordance with Rule 391-3-4-.10(6)(c).

1.1 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. Areas where CCR Removal Reports have been submitted to GA EPD are shown in **Figure 2.** Monitoring well and piezometer locations are shown on **Figure 3**.

Two permit application packages were submitted to GAEPD in November 2018: one for AP-3, A, B, and B', and another for the R6 CCR Landfill. Due to the configuration of the units and overall groundwater flow direction, both permits propose combining the monitoring systems of AP-3, A, B, and B' and the R6 Landfill into a single multi-unit monitoring system that meets federal and state monitoring requirements. Although the permit application is still in review, Georgia Power proactively began monitoring the R6 Landfill as part of a combined multi-unit monitoring program. Groundwater monitoring and reporting for the CCR units are performed in accordance with the monitoring requirements presented in §§ 257.90 through 257.95 of the federal CCR Rule and GAEPD Rule 391-3-4-.10(6)(a)-(c).

Assessment monitoring of the groundwater monitoring unit at AP-3, A, B, and B' began according to 40 CFR § 257.95 in January 2018. An Assessment of Corrective Measures (ACM) Report for AP-3, A, B, and B' was submitted in June 2019 per 40 CFR § 257.96 to address a statistically significant level (SSL) of beryllium. The initial groundwater monitoring report for the R6 CCR Landfill was completed on July 31, 2019 (Atlantic Coast Consulting, Inc. [ACC] 2019). Assessment monitoring for the R6 CCR Landfill was initiated on November 13, 2019. The current semiannual remedy selection progress report for the combined groundwater monitoring unit at AP-3, A, B, B', and the R6 Landfill addresses beryllium, selenium, and lithium SSLs and is included in **Appendix A**.

This 2021 Semiannual Groundwater Monitoring and Corrective Action Report includes combined results for assessment monitoring of AP-3, A, B, B' and the R6 CCR Landfill.

1.2 Regional 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 photographs of the Plant Yates area (ACC 2020).

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 and varies with topography. 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 typically ranges from 10^{-3} to 10^{-4} centimeters per second, based on multiple rising-head and falling-head slug tests (ACC 2019). This indicates a fairly uniform medium across the saprolite and weathered rock horizon. The hydraulic conductivity values from the field tests fall within a range consistent with that of Piedmont overburden (Newell et al. 1990).

1.3 Groundwater Monitoring Well Network and CCR Unit Description

Pursuant to 40 CFR § 257.91, a multi-unit groundwater monitoring system was installed within the uppermost aquifer at the site. The multi-unit monitoring system is designed to monitor groundwater passing the waste boundary of the CCR units 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 1A**. Additionally, a series of piezometers and non-network wells is installed to supplement characterization and groundwater elevation measurements (**Table 1B**).

As is typical of the Piedmont Physiographic Province, there is a degree of connectivity between the saprolite and partially weathered rock units (Harned, D.A., and Daniel, C.C., III 1992). 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. Wells suffixed with an "S" are installed in saprolite; an "I" indicates partially weathered rock (transition zone), and a "D" indicates upper bedrock. The monitoring well network for the site is depicted on **Figure 3**.

2 Groundwater Monitoring

Pursuant to 40 CFR § 257.90(e), the following describes monitoring-related activities performed in 2021 and presents the status of the monitoring program. Groundwater sampling was performed in accordance with 40 CFR § 257.93. Samples were collected from each well in the monitoring system shown on **Figure 3**.

Groundwater sampling events conducted by Arcadis U.S., Inc. (Arcadis) in 2021 at AP-3, A, B, B', and the R6 CCR Landfill are summarized in **Table 2**. Field sampling logs are provided in **Appendix B**.

2.1 Monitoring Well Installation and Maintenance

Deep bedrock piezometer PZ-37D was installed in April 2021 to delineate selenium and monitor the portion of the bedrock aquifer below PZ-37. A Well Installation Report for PZ-37D was submitted to GAEPD under a separate cover on June 30, 2021. Deep bedrock piezometers PZ-52D and PZ-53D were installed in September 2021 to further delineate selenium and monitor the bedrock aquifer below PZ-37 and above PZ-37D. PZ-52D is screened from 82 feet to 92 feet below ground surface (bgs); PZ-53D is screened from 150 feet to 160 feet bgs. A Well Installation Report for PZ-52D and PZ-53D was submitted to GAEPD under a separate cover on November 29, 2021. The PZ-37D and PZ-52D analytical data are included in **Table 6** and discussed in the Semiannual Remedy Selection and Design Progress Report (**Appendix A**). Copies of the Well Installation Reports for PZ-37D, PZ-52D, and PZ-53D are included in **Appendix C**.

The outer protective casing for YGWC-23S was inadvertently damaged during ongoing site construction activities. A new concrete pad and protective casing was installed on September 9, 2021 as documented in a well repair memorandum along with well inspection records in **Appendix B**. Other monitoring well-related activities were limited to visually inspecting well conditions prior to sampling, recording site conditions, and performing exterior maintenance to provide safe access for sampling.

Monitoring wells are inspected semiannually to determine if any repairs or corrective actions are necessary to meet the requirements of the Georgia Water Well Standards Act (O.C.G.A. § 12-5-134(5)(d)(vii)). In August 2021, monitoring wells were inspected, necessary corrective actions were identified and subsequently completed, as documented in **Appendix B**. This documentation will serve as the required five year well inspection and was performed under the direction of a professional geologist or engineer registered in the State of Georgia.

2.2 Assessment Monitoring

An assessment monitoring program was initiated on January 14, 2018 at AP-3, B, and B' and in September 2019 for AP-A. A notice of assessment monitoring was placed in the operating record on May 15, 2018. AP-A is an inactive surface impoundment subject to the revised requirements of 40 CFR § 257.100 and was added to the

multi-unit system on April 17, 2019. Assessment monitoring was initiated at the R6 CCR Landfill following review of the results of the March 2019 monitoring event. The first semiannual assessment monitoring event for the R6 CCR Landfill occurred in October 2019; a notice of assessment monitoring for the R6 CCR Landfill was placed in the operating record on November 13, 2019. AP-3, A, B, B' and the R6 CCR Landfill currently remain in assessment monitoring as corrective measures are evaluated.

Monitoring wells at the site were sampled for Appendix IV parameters in February 2021 pursuant to 40 CFR § 257.95(b). In accordance with 40 CFR § 257.95(d), two semiannual assessment monitoring events occurred in March and August/September 2021 in which samples were collected and analyzed for Appendix III parameters and Appendix IV parameters detected at concentrations exceeding the laboratory method detection limit (MDL) during the February 2021 event. Groundwater sampling activities completed during the reporting period as part of semiannual assessment monitoring are summarized in **Table 2**.

2.3 Other Groundwater Sampling

To further characterize groundwater quality at the site, samples were collected from wells YAMW-1 through YAMW-5, PZ-35, PZ-37 in February, March, and August/ September 2021. To further delineate selenium concentrations vertically near PZ-37, samples were collected following installation PZ-37D in May and September 2021. Further PZ-37 delineation efforts also included sample collection following installation of PZ-52D in November 2021.

The occurrence of a lithium SSL was exhibited at YGWC-42 for the first time during the in the August sampling event as discussed further in Section 4.2.3. Groundwater samples were collected on November 17, 2021 from delineation wells YAMW-3 and PZ-51 to further characterize lithium concentrations in the vicinity and downgradient of YGWC-42. Well locations are presented on **Figure 3**. Sampling and analysis were performed following the procedures outlined in Section 3. Analytical results of this additional sampling are included in **Table 6** and discussed in the Semiannual Remedy Selection and Design Progress Report included in **Appendix A**.

2.4 Assessment of Corrective Measures

Based on assessment monitoring results presented in the 2018 Annual Groundwater and Corrective Action Monitoring Report, a Notice of Assessment of Corrective Measures was placed in the operating record on February 12, 2019 for the AP-3, B, and B' units in accordance with 40 CFR § 257.96. AP-A was added to the multi-unit groundwater monitoring system on April 17, 2019. The Assessment of Corrective Measures Report for AP-3, A, B, and B' was placed in the operating record on June 12, 2019. The first Semiannual Remedy Selection and Design Progress Report was submitted on December 12, 2019 and updated on January 31, 2020 to include the R6 CCR Landfill which was incorporated into the ACM. **Appendix A** contains the second 2021 Semiannual Remedy Selection and Design Progress Report.

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 the February, March, and August/September 2021 sampling events, static water levels were recorded from piezometers and wells in the well network at AP-3, A, B, B' and the R6 CCR Landfill. Water levels were collected from the monitoring wells and piezometers as noted in **Table 3**.

Saprolite, transition zone, and shallow bedrock groundwater elevation data were used to prepare potentiometric surface elevation contour maps for February, March, and August 2021 (**Figures 4, 5,** and **6,** respectively). Groundwater elevations ranged from 722.27 feet (YGWC-43) to 801.56 feet (YGWA-39). The groundwater flow direction for the saprolite, transition zone, and shallow bedrock wells is generally toward the west, northeast, and east from the area south of the R6 Landfill ash disposal area, which serves as a topographic high and groundwater recharge area. Groundwater flows west from the eastern portions of the Ash Management Area, AP-3 area, and AP-B' area to the central portion of the site. The groundwater flow direction is consistent with historical patterns and follows the topographic low between the Ash Management Area (AMA) and R6. Deeper bedrock groundwater elevations vary across the site, ranging from 722.27 feet (YGWC-43) to 801.56 feet (YGWA-39). It is interpreted that these variations are attributed to bedrock geologic structural controls, and therefore do not reflect the surficial aquifer potentiometric surface. Based on this interpretation, the deep bedrock potentiometric surface was not used for contouring.

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

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

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). Calculated groundwater flow velocities for 2021 are presented in **Table 4**. The calculated average linear flow velocity for the 2021 reporting period is 26 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, thereby, confirming the groundwater monitoring network is properly located to monitor the uppermost aquifer.

3.2 Groundwater Sampling

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

An AquaTroll 600 (In-Situ® field instrument) was used to monitor and record field water quality parameters during well purging. The stabilization criteria for pH and specific conductivity readings, as noted below, were used to verify stabilization prior to 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 unit for pH;
- ± 5% for specific conductivity; and
- Less than 5 nephelometric turbidity units for turbidity
- ±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 containers with preservative (where applicable). The sample containers were immediately placed on ice in an insulated cooler. The samples were submitted to Pace Analytical Services, LLC following chain-of-custody protocol. Stabilization logs for each well are included in **Appendix B**.

3.3 Laboratory Analyses

During the February 2021 sampling event, the AP-3, A, B, B', and R6 CCR Landfill wells were sampled for analysis of Appendix IV parameters according to 40 CFR § 257.95(b). Sampling locations per field event are summarized in **Table 2**. **Table 5** provides a summary of the constituents monitored during the events. Groundwater samples collected during the semiannual events in March and August/September 2021 were analyzed for Appendix III parameters as well as those Appendix IV parameters detected above the laboratory MDL during the February 2021 event, in accordance with 40 CFR § 257.95(d). Thallium was not detected above the laboratory MDL during the February 2021 annual assessment event. Therefore, it was not sampled for in March and August/September 2021. The methods used for groundwater sample analyses are listed in the analytical laboratory reports included in **Appendix D**.

Analytical data collected during the 2021 sampling events are summarized in **Table 6**. Laboratory analyses were performed by Pace Analytical Services, LLC, which is accredited by the National Environmental Laboratory Accreditation Program and maintains this certification for all parameters analyzed for this project. Laboratory reports and chain-of-custody records for the monitoring events are included in **Appendix D**.

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 sample per every 10 samples. QA/QC samples included equipment blanks (where non-dedicated equipment was used), field blanks, and duplicate samples. Groundwater quality data in this report were validated in accordance with USEPA guidance (USEPA 2011) and analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spike/matrix spike duplicate recoveries and relative percent differences, post-digestion spikes, laboratory and field duplicate relative percent differences, equipment blanks, and reporting limits. Where appropriate, validation qualifiers and flags have been applied to the data using USEPA procedures as guidance (USEPA 2017). The data validation report included in **Appendix D** summarizes the validation actions and applicable interpretation.

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

A "J" flag following a value indicates 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 obtained from the AP-3, A, B, B', and R6 Landfill 2021 assessment monitoring events was performed pursuant to 40 CFR §§ 257.93–95 following established, certified statistical methods. The statistical method for 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 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 Statistical Methods

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 March 2021 event 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 statistically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine whether the result was an outlier. If resampling is performed and the initial finding is not verified, the resampled value replaces the initial finding. When the resample confirms the initial result, both values remain in the database and an SSI is declared. The following criteria were applied to the evaluation:

- Statistical analyses were not performed on analytes containing 100 percent non-detects.
- When data contained less than 15 percent non-detects in background samples, 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 Assessment Monitoring Statistical Methods

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

The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. The background levels are then used when determining the groundwater protection standards (GWPS) in accordance with 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 40 CFR §§ 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; or
- The background level for constituents for which the background level is higher than the MCL or CCR Rule identified GWPS.

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

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

In accordance with the above federal and state rules, GWPSs have been established for statistical comparison of Appendix IV constituents at AP-3, A, B, B', and the R6 CCR Landfill. **Table 7** summarizes the background limits established for each monitoring well for the March and August/September 2021 sampling events as well as the GWPSs established under federal and state rules.

To complete the statistical comparison to GWPSs, confidence intervals were constructed for each of the Appendix IV parameters detected in each downgradient well. Those confidence intervals were compared to the GWPSs established under federal and state rules. A sampling result from a well/constituent pair was considered to exceed

its respective standard only when results from 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 constituent concentrations have returned to background levels. Appendix IV assessment monitoring parameters were evaluated for AP-3, A, B, B,' and the R6 CCR Landfill to determine whether concentrations statistically exceed the established GWPSs. Appendix IV analytical data from the 2021 semiannual assessment monitoring events for the combined AP-3, A, B, B', and R6 CCR Landfill were statistically analyzed in accordance with the Statistical Analysis Plan (Groundwater Stats Consulting 2019).

4.2.1 Appendix III Monitoring Constituents

Based on review of the Appendix III statistical analysis from the March and August/September 2021 sampling events presented in **Appendix E**, Appendix III constituents have not returned to background levels; therefore, assessment monitoring should continue pursuant to 40 CFR § 257.95(f). **Appendix E** includes a table summarizing site monitoring wells for which analytical sampling results have identified constituents with SSIs from each semiannual event.

4.2.2 Appendix IV Assessment Monitoring Constituents – March 2021

Statistical analysis of the March 2021 Appendix IV data was completed using the GWPSs established according to 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a). The following SSLs were identified:

- Beryllium: YGWC-38; and
- Selenium: YGWC-38 and PZ-37.

Sanitas™ statistical output data for calculation of site-specific background concentrations (interwell tolerance limits) and confidence intervals for each Appendix IV constituent in downgradient wells are provided in **Appendix E**.

4.2.3 Appendix IV Assessment Monitoring Constituents – August and September 2021

Statistical analysis of the August and September 2021 Appendix IV data was completed using the GWPSs established according to 40 CFR § 257.95(h) and GAEPD Rule 391-3-4-.10(6)(a). The following SSLs were identified:

- Beryllium: YGWC-38;
- Lithium: YGWC-42; and
- Selenium: YGWC-38 and PZ-37.

Sanitas™ statistical output data for calculation of site-specific background concentrations (interwell tolerance limits) and confidence intervals for each Appendix IV constituent in downgradient wells are provided in **Appendix E**.

5 Monitoring Program Status

In accordance with 40 CFR § 257.94(e), an assessment monitoring program was implemented in January 2018 for AP-3, A, B, and B'. SSLs of Appendix IV parameters were identified for the multi-unit network during the 2019 assessment monitoring events. The R6 CCR Landfill was placed in assessment monitoring following the initial detection monitoring event in March 2019, and assessment monitoring was initiated with the second 2019 semiannual monitoring event. Pursuant to 40 CFR § 257.96(b), Georgia Power will continue to monitor groundwater at AP-3, A, B, B', and the R6 CCR Landfill in accordance with the assessment monitoring program regulations of 40 CFR § 257.95 while ACM efforts are implemented to evaluate SSL concentrations of beryllium, lithium, and selenium.

Horizontal and vertical delineation of current and historical SSLs of beryllium, cobalt, and selenium is complete. Lithium concentrations in the horizontal delineation wells are below the relevant GWPS. Georgia Power will continue to monitor these wells until an adequately sized data set is available to complete statistical analyses. Additional data will be collected to evaluate the vertical delineation of lithium at YAMW-3. The ACM efforts completed during the reporting period are summarized in the Semiannual Remedy Selection and Design Progress Report in **Appendix A**. Georgia Power will continue to include future semiannual progress reports with each groundwater monitoring and corrective action report.

6 Conclusions and Recommendations

This 2021 Annual Groundwater Monitoring and Corrective Action Report was prepared to fulfill the requirements of USEPA's 40 CFR §257.95 and GAEPD's Rule 391-3-4-.10. The groundwater flow direction interpreted during this event is consistent with historical evaluations. Statistical evaluations of groundwater monitoring data for the combined monitoring unit AP-3, A, B, B', and the R6 Landfill identified SSLs of beryllium in well YGWC-38, selenium in well YGWC-38 and delineation well PZ-37, and, based on the August data, lithium in well YGWC-42. Delineation data for beryllium and selenium SSLs provide spatial and vertical delineation to concentrations below the GWPSs. The lithium SSL at YGWC-42 is spatially delineated downgradient by PZ-51 and YGWC-43; vertical delineation is still being evaluated.

Assessment monitoring at AP-3, A, B, B', and the R6 CCR Landfill will continue pursuant to 40 CFR § 257.95. In addition, ACM efforts of the multi-unit site will continue as required by 40 CFR § 257.96. The next assessment monitoring event is scheduled for February 2022. The February semiannual monitoring event will be a combined event to meet the requirements of GAEPD Rule 391-3-4-.10(6) and 40 CFR §§ 257.95(b) and (d)(1) and will include sampling and analysis of all Appendix III and IV constituents.

7 References

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Tables

Table 1A
Monitoring Well Network Summary
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Well ID	Installation Date	Top of Casing Elevation (ft)	Depth to Bottom (ft bTOC)	Bottom Elevation (ft)	Depth to Top of Screen (ft bTOC)	Top of Screen Elevation (ft)	Hydraulic Location
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
AP-3, A, B and B'							
YGWC-23S	9/21/2015	764.95	38.91	726.00	28.61	736.30	Downgradient
YGWC-24SA	6/4/2020	765.00	57.00	708.00	47.00	718.00	Downgradient
YGWC-36A	9/22/2020	740.88	51.20	689.68	41.18	699.70	Downgradient
YGWC-49	7/13/2016	782.73	78.53	704.20	67.63	715.10	Downgradient
R6 CCR Landfill							
YGWC-38	7/23/2016	799.69	49.59	749.10	39.59	760.10	Downgradient
YGWC-41	7/8/2016	803.92	66.82	736.60	56.82	747.10	Downgradient
YGWC-42	7/8/2016	797.86	59.76	738.10	49.36	748.50	Downgradient
YGWC-43	7/9/2016	744.96	79.66	665.30	69.16	675.80	Downgradient

Notes:
Elevation is presented in U.S. Survey Feet (North American Vertical Datum of 1988) based on June 2020 survey.

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

Table 1B
Non- Network Well Summary
2021 Annual Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Well ID	Installation Date	Top of Casing Elevation (ft)	Depth to Bottom (ft bTOC)	Bottom Elevation (ft)	Depth to Top of Screen (ft bTOC)	Top of Screen Elevation (ft)	Purpose
AP-3, A, B and B'							
YGWA-6S	5/19/2014	782.47	39.87	742.60	29.57	752.90	Piezometer
YGWA-6I	5/19/2014	782.73	69.03	713.70	58.73	724.00	Piezometer
YAMW-1	9/19/2018	743.83	69.93	673.90	59.93	683.90	Downgradient
PZ-04S	5/21/2014	784.25	32.75	751.50	22.45	761.80	Piezometer
PZ-05S	5/21/2014	784.64	41.94	742.70	31.64	753.00	Piezometer
PZ-06D	5/19/2014	782.02	134.02	648.00	83.72	698.30	Piezometer
PZ-24IA	6/3/2020	764.33	89.53	674.80	79.53	684.80	Piezometer
PZ-35	7/20/2016	743.81	50.01	693.80	38.91	704.90	Downgradient
PZ-48	7/11/2016	779.83	58.73	721.10	48.43	731.40	Piezometer
R6 CCR Landfill							
PZ-37	7/6/2016	760.78	49.78	711.00	39.28	721.50	Piezometer
PZ-37D	4/16/2021	761.12	202.30	558.80	192.30	568.80	Piezometer
PZ-51	11/8/2019	744.30	36.32	707.98	26.32	717.98	Piezometer
PZ-52D	9/28/2021	762.79	94.89	677.50	84.89	677.90	Piezometer
PZ-53D	9/28/2021	762.80	162.90	599.50	152.90	609.90	Piezometer
YAMW-2	11/12/2019	781.04	46.48	734.56	36.48	744.56	Downgradient
YAMW-3	11/6/2019	796.05	91.44	704.61	81.44	714.61	Downgradient
YAMW-4	11/7/2019	805.59	96.55	709.04	86.55	719.04	Downgradient
YAMW-5	11/13/2019	788.90	90.34	698.56	80.34	708.56	Downgradient

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 Plan
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Well ID	Hydraulic Location	Assessment [1] Monitoring	2021 First Semiannual Sampling [2]	2021 Second Semiannual Sampling [2]
		February 8-10, 2021	March 2-4, 2021	August 25-27 & September 1-3 & 27, 2021
AP-3, A, B and B'				
YGWA-4I	Upgradient	X	X	X
YGWA-5I	Upgradient	X	X	X
YGWA-5D	Upgradient	X	X	X
YGWA-17S	Upgradient	X	X	X
YGWA-18S	Upgradient	X	X	X
YGWA-18I	Upgradient	X	X	X
YGWA-20S	Upgradient	X	X	X
YGWA-21I	Upgradient	X	X	X
YGWC-23S	Downgradient	X	X	X
YGWC-24SA	Downgradient	X	X	X
YGWC-36A	Downgradient	X	X	X
YGWC-49	Downgradient	X	X	X
YAMW-1	Downgradient	X	X	X
PZ-35	Downgradient	X	X	X
R6 CCR Landfill				
YGWA-39	Upgradient	X	X	X
YGWA-40	Upgradient	X	X	X
YGWC-38	Downgradient	X	X	X
YGWC-41	Downgradient	X	X	X
YGWC-42	Downgradient	X	X	X
YGWC-43	Downgradient	X	X	X
YAMW-2	Downgradient	X	X	X
YAMW-4	Downgradient	X	X	X
YAMW-5	Downgradient	X	X	X
PZ-37	Downgradient	X	X	X
PZ-37D	Downgradient			X

Notes:

1. All wells analyzed per Appendix IV.

2. Appendix III and detected Appendix IV.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

Additional wells sampled following the Second Semiannual Sampling Event included: PZ-51 (11/17/21), YAMW-3 (11/17/21, 12/9/21), and PZ-52D (11/4/21).

Table 3
Summary of Groundwater Elevations - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Well ID	Date	TOC Elevation (ft)	Depth to Water (ft bTOC)	Groundwater Elevation (ft)
February 2021				
YGWA-4I	2/8/2021	784.21	22.62	761.59
YGWA-5I	2/8/2021	784.54	18.75	765.79
YGWA-5D	2/8/2021	784.53	21.77	762.76
YGWA-6S	2/8/2021	782.47	17.54	764.93
YGWA-6I	2/8/2021	782.73	18.90	763.83
YGWA-17S	2/8/2021	783.05	11.85	771.20
YGWA-18S	2/8/2021	790.57	19.55	771.02
YGWA-18I	2/8/2021	790.57	22.90	767.67
YGWA-20S	2/8/2021	767.12	11.19	755.93
YGWA-21I	2/8/2021	783.70	31.21	756.10
YGWC-23S	2/8/2021	794.91	16.95	747.44
YGWC-24SA	2/8/2021	765.00	28.00	737.00
YGWC-36A	2/8/2021	740.88	9.58	731.30
YGWC-38	2/8/2021	799.69	30.75	768.78
YGWA-39	2/8/2021	818.19	17.37	800.82
YGWA-40	2/8/2021	815.73	22.93	792.80
YGWC-41	2/8/2021	803.92	27.44	776.48
YGWC-42	2/8/2021	797.86	28.19	769.67
YGWC-43	2/8/2021	744.96	16.36	728.60
YGWC-49	2/8/2021	782.73	31.72	751.01
PZ-35	2/8/2021	743.81	11.25	732.56
PZ-04S	2/8/2021	784.25	24.13	760.12
PZ-05S	2/8/2021	784.64	18.69	765.95
PZ-06D	2/8/2021	782.02	21.72	760.30
PZ-24IA	2/8/2021	764.33	28.25	736.08
PZ-37	2/8/2021	760.78	12.55	746.40
PZ-48	2/8/2021	799.83	19.74	780.09
PZ-51	2/8/2021	744.30	7.36	736.94
YAMW-1	2/8/2021	743.83	11.07	732.76
YAMW-2	2/8/2021	781.04	20.79	760.25
YAMW-3	2/8/2021	796.05	35.46	760.59
YAMW-4	2/8/2021	805.59	31.09	774.50
YAMW-5	2/8/2021	788.90	13.48	775.42
March 2021				
YGWA-4I	3/2/2021	784.21	22.12	762.09
YGWA-5I	3/2/2021	784.54	18.19	766.35
YGWA-5D	3/2/2021	784.53	21.88	762.65
YGWA-6S	3/2/2021	782.47	17.87	764.60
YGWA-6I	3/2/2021	782.73	18.25	764.48
YGWA-17S	3/2/2021	783.05	11.38	771.67
YGWA-18S	3/2/2021	790.57	18.94	771.63
YGWA-18I	3/2/2021	790.57	22.41	768.16
YGWA-20S	3/2/2021	767.12	11.28	755.84
YGWA-21I	3/2/2021	783.70	31.10	756.10
YGWC-23S	3/2/2021	794.91	16.59	747.44
YGWC-24SA	3/2/2021	765.00	27.45	737.55
YGWC-36A	3/2/2021	740.88	10.02	730.86
YGWC-38	3/2/2021	799.69	30.42	768.78
YGWA-39	3/2/2021	818.19	16.66	801.53
YGWA-40	3/2/2021	815.73	22.39	793.34
YGWC-41	3/2/2021	803.92	26.88	777.04
YGWC-42	3/2/2021	797.86	27.54	770.32
YGWC-43	3/2/2021	744.96	16.15	728.81
YGWC-49	3/2/2021	782.73	31.50	751.23
PZ-35	3/2/2021	743.81	11.14	732.67
PZ-04S	3/2/2021	784.25	23.74	760.51
PZ-05S	3/2/2021	784.64	18.14	766.50
PZ-06D	3/2/2021	782.02	21.22	760.80

Table 3
Summary of Groundwater Elevations - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Well ID	Date	TOC Elevation (ft)	Depth to Water (ft bTOC)	Groundwater Elevation (ft)
PZ-24IA	3/2/2021	764.33	27.68	736.65
PZ-37	3/2/2021	760.78	11.93	746.40
PZ-48	3/2/2021	799.83	19.35	780.48
PZ-51	3/2/2021	744.30	6.98	737.32
YAMW-1	3/2/2021	743.83	10.80	733.03
YAMW-2	3/2/2021	781.04	19.75	761.29
YAMW-3	3/2/2021	796.05	34.58	761.47
YAMW-4	3/2/2021	805.59	30.32	775.27
YAMW-5	3/2/2021	788.90	13.03	775.87
August 2021				
YGWA-4I	8/17/2021	784.21	23.32	760.89
YGWA-5I	8/17/2021	784.54	19.57	764.97
YGWA-5D	8/17/2021	784.53	22.23	762.30
YGWA-6S	8/17/2021	782.47	18.92	763.55
YGWA-6I	8/16/2021	782.73	4.05	778.68
YGWA-17S	8/16/2021	783.05	13.30	769.75
YGWA-18S	8/16/2021	790.57	20.73	769.84
YGWA-18I	8/16/2021	790.57	23.94	766.63
YGWA-20S	8/17/2021	767.12	11.08	756.04
YGWA-21I[1]	8/17/2021	783.70	21.50	762.20
YGWC-23S[2]	8/25/2021	764.95	16.72	748.23
YGWC-24SA	8/16/2021	765.00	28.21	736.79
YGWC-36A	8/16/2021	740.88	12.60	728.28
YGWC-38	8/16/2021	799.69	29.75	768.78
YGWA-39	8/16/2021	818.19	16.63	801.56
YGWA-40	8/16/2021	815.73	23.18	792.55
YGWC-41	8/16/2021	803.92	27.68	776.24
YGWC-42	8/16/2021	797.86	28.62	769.24
YGWC-43	8/16/2021	744.96	22.69	722.27
YGWC-49	8/16/2021	782.73	31.89	750.84
PZ-35	8/16/2021	743.81	13.04	730.77
PZ-04S	8/17/2021	784.25	24.79	759.46
PZ-05S	8/17/2021	784.64	19.55	765.09
PZ-06D	8/17/2021	782.02	22.31	759.71
PZ-24IA	8/16/2021	764.33	28.82	735.51
PZ-37	8/16/2021	760.78	11.74	749.04
PZ-37D	8/16/2021	761.12	5.86	755.26
PZ-48	8/16/2021	799.83	20.50	779.33
PZ-51	8/16/2021	744.30	10.06	734.24
YAMW-1	8/16/2021	743.83	12.73	731.10
YAMW-2	8/16/2021	781.04	22.29	758.75
YAMW-3	8/16/2021	796.05	36.12	759.93
YAMW-4	8/16/2021	805.59	31.45	774.14
YAMW-5	8/16/2021	788.90	12.70	776.20
November 2021				
PZ-52D	11/4/2021	762.79	6.09	756.70

Notes:

Elevation is presented in U.S. Survey Feet (North American Vertical Datum of 1988) based on June 2020 survey. PZ-52D surveyed 10/20/2021.

[1] Water level taken from transducer reading due to monitoring well access issues.

[2] Well innaccessible during initial grauging event due to Tropical Storm Fred.

Acronyms and Abbreviations:

bTOC = below top of casing

ft = feet

TOC = top of casing

Table 4
Groundwater Flow Velocity Calculations - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

ARCADIS

Equation

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

where:

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

Values Used in Calculation

Value			Source
K_{max}:	3.70E-03	cm/sec	See note 1
	10	ft/day	
K_{min}:	9.70E+05	cm/sec	
	0.28	ft/day	
K_{avg}:	2.90E-04	cm/sec	
	0.8	ft/day	
Distance from:			
YGWA-40 to YGWA-42	1,098	feet	
YGWC-49 to PZ-24I	1,002	feet	
Groundwater Elevation			Date Collected:
YGWA-40	792.80	feet	February 2021
YGWC-42	769.67		
YGWC-49	751.01		
PZ-24IA	736.08		
YGWA-40	793.34	feet	March 2021
YGWC-42	770.32		
YGWC-49	751.23		
PZ-24IA	736.65		
YGWA-40	792.55	feet	August 2021
YGWC-42	769.24		
YGWC-49	750.84		
PZ-24IA	735.51		
			Hydraulic gradient from:
i_1 = 0.021		unitless	YGWA-40 to YGWC-42 (Feb. 2021)
i_2 = 0.015		unitless	YGWC-49 to PZ-24I (Feb. 2021)
i_{avg} = 0.018		unitless	Average
i_1 = 0.021		unitless	YGWA-40 to YGWC-42 (Mar. 2021)
i_2 = 0.015		unitless	YGWC-49 to PZ-24I (Mar. 2021)
i_{avg} = 0.018		unitless	Average
i_1 = 0.021		unitless	YGWA-40 to YGWC-42 (Aug. 2021)
i_2 = 0.015		unitless	YGWC-49 to PZ-24I (Aug. 2021)
i_{avg} = 0.018		unitless	Average
n_e = 0.20		unitless	See note 2

Table 4
Groundwater Flow Velocity Calculations - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

ARCADIS

Minimum Linear Flow Velocity

February 2021	*March 2021*	*August 2021*
$V_{min} = \frac{(0.28)\ (0.018)}{0.20}$	$V_{min} = \frac{(0.28)\ (0.018)}{0.20}$	$V_{min} = \frac{(0.28)\ (0.018)}{0.20}$
V_{min} = 0.03 ft/day, or 11 ft/year	V_{min} = 0.03 ft/day, or 11 ft/year	V_{min} = 0.03 ft/day, or 11 ft/year

Maximum Linear Flow Velocity

February 2021	*March 2021*	*August 2021*
$V_{max} = \frac{(10)\ (0.018)}{0.20}$	$V_{max} = \frac{(10)\ (0.018)}{0.20}$	$V_{max} = \frac{(10)\ (0.018)}{0.20}$
V_{max} = 0.9 ft/day, or 329 ft/year	V_{max} = 0.9 ft/day, or 329 ft/year	V_{max} = 0.9 ft/day, or 329 ft/year

Average Linear Flow Velocity

February 2021	*March 2021*	*August 2021*
$V_{avg} = \frac{(0.8)(0.018)}{0.20}$	$V_{avg} = \frac{(0.8)(0.018)}{0.20}$	$V_{avg} = \frac{(0.8)(0.018)}{0.20}$
V_{avg} = 0.07 ft/day, or 26 ft/year	V_{avg} = 0.07 ft/day, or 26 ft/year	V_{avg} = 0.07 ft/day, or 26 ft/year

Notes:

1. Slug tests performed by Atlantic Coast Consulting, Inc. at AP-3/B'B'/R6 (2014-2017). Geomean of test results used for Kavg

2. Default value recommended by USEPA for silty sand-type soil (USEPA 1989).

Table 5
Summary of Groundwater Monitoring Parameters
2021 Annual Groundwater Monitoring and Corrective Action Report
Georgia Power Company
Plant Yates AP-3, A, B, B' and R6 CCR Landfill

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:
Italicized groundwater monitoring parameters were not detected during the annual assessment event (February 2021) and therefore not included in March and August/September 2021 semiannual parameter lists.

CFR = Code of Federal Regulations

Table 6
Groundwater Analytical Data - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWA-4I	YGWA-4I	YGWA-4I	YGWA-5D	YGWA-5D	YGWA-5D	YGWA-5I	YGWA-5I	YGWA-5I
		2/9/2021	3/3/2021	8/26/2021	2/8/2021	3/2/2021	8/26/2021	2/8/2021	3/2/2021	8/26/2021
Appendix III	pH	6.06	6.21	5.82	7.66	7.15	7.16	5.67	5.63	5.51
	Boron	--	0.0056 J	< 0.0086	--	0.0068 J	0.0090 J	--	0.011 J	< 0.0086
	Calcium	--	7.7	7.6	--	1.6	25.2	--	2.6	2.5
	Chloride	--	4.1	4.4	--	3.2	3.4	--	4.3	4.3
	Fluoride	< 0.050	< 0.050	< 0.050	0.055 J	< 0.050	0.061 J	< 0.050	< 0.050	< 0.050
	Sulfate	--	7.8	8.5	--	2.6	6.0	--	2.3	2.4
	Total Dissolved Solids	--	80.0	93.0	--	52.0	123	--	67.0	86.0
Appendix IV	Antimony	< 0.00028	< 0.00028	< 0.00078	< 0.00028	< 0.00028	< 0.00078	< 0.00028	< 0.00028	< 0.00078
	Arsenic	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	0.0016 J	< 0.00078	< 0.00078	< 0.0011
	Barium	0.013	0.014	0.012	0.0079 J	0.014	0.0092	0.020	0.019	0.019
	Beryllium	< 0.000046	< 0.000046	< 0.000054	< 0.000046	< 0.000046	< 0.000054	< 0.000046	< 0.000046	< 0.000054
	Cadmium	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011
	Chromium	< 0.00055	0.0013 J	< 0.0011	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011
	Cobalt	< 0.00038	< 0.00038	0.00042 J	< 0.00038	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039
	Lead	< 0.000036	< 0.000036	< 0.00089	0.00013 J	0.000051 J	< 0.00089	0.000037 J	0.000092 J	< 0.00089
	Lithium	0.011 J	0.012 J	0.0094 J	0.0063 J	0.0018 J	0.0075 J	0.0032 J	0.0031 J	0.0032 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	< 0.00069	< 0.00069	< 0.00074	0.0011 J	< 0.00069	0.0010 J	< 0.00069	< 0.00069	< 0.00074
	Combined Radium - 226/228	0.626 U	1.00	1.17 U	2.89	1.67	4.68	0.613 U	0.579 U	0.798 U
	Selenium	< 0.0016	0.0019 J	< 0.0014	< 0.0016	< 0.0016	< 0.0014	< 0.0016	< 0.0016	< 0.0014
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

J: Estimated concentration above the method detection limit and below the reporting

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 6
Groundwater Analytical Data - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWA-17S	YGWA-17S	YGWA-17S	YGWA-18I	YGWA-18I	YGWA-18I	YGWA-18S	YGWA-18S	YGWA-18S
		2/9/2021	3/3/2021	8/27/2021	2/9/2021	3/3/2021	8/27/2021	2/9/2021	3/3/2021	8/26/2021
Appendix III	pH	5.62	5.52	5.27	6.12	5.89	5.40	5.43	5.31	4.40
	Boron	--	0.010 J	0.011 J	--	< 0.0052	< 0.0086	--	0.0094 J	< 0.0086
	Calcium	--	2.5	2.7	--	5.2	5.1	--	0.96 J	0.98 J
	Chloride	--	7.1	8.5	--	7.0	7.4	--	7.2	7.3
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	--	5.2	5.3	--	< 0.50	0.59 J	--	1.0	1.2
	Total Dissolved Solids	--	57.0	93.0	--	95.0	112	--	37.0	31.0
Appendix IV	Antimony	< 0.00028	< 0.00028	< 0.00078	< 0.00028	< 0.00028	< 0.00078	< 0.00028	0.00067 J	< 0.00078
	Arsenic	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	< 0.0011
	Barium	0.016	0.017	0.016	0.023	0.023	0.020	0.017	0.017	0.015
	Beryllium	0.000094 J	0.000099 J	0.00010 J	< 0.000046	< 0.000046	< 0.000054	0.000098 J	0.00011 J	0.000093 J
	Cadmium	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011
	Chromium	0.00098 J	0.00082 J	< 0.0011	0.00083 J	0.00087 J	< 0.0011	0.0013 J	0.0010 J	< 0.0011
	Cobalt	< 0.00038	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039
	Lead	< 0.000036	< 0.000036	< 0.00089	0.000050 J	< 0.000036	< 0.00089	0.000094 J	0.000076 J	< 0.00089
	Lithium	< 0.00081	< 0.00081	< 0.00073	0.0031 J	0.0034 J	0.0032 J	0.0019 J	0.0021 J	0.0019 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074
	Combined Radium - 226/228	0.529 U	0.590 U	0.900 U	0.314 U	0.565 U	0.761 U	0.259 U	0.352 U	0.686 U
	Selenium	< 0.0016	< 0.0016	< 0.0014	< 0.0016	< 0.0016	< 0.0014	< 0.0016	< 0.0016	< 0.0014
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

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Table 6
Groundwater Analytical Data - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWA-20S	YGWA-20S	YGWA-20S	YGWA-21I	YGWA-21I	YGWA-21I	YGWA-39	YGWA-39	YGWA-39
		2/9/2021	3/3/2021	8/27/2021	2/9/2021	3/4/2021	9/1/2021	2/10/2021	3/4/2021	8/26/2021
Appendix III	pH	5.86	5.89	5.57	6.95	6.80	6.65	5.80	5.54	6.91
	Boron	--	< 0.0052	< 0.0086	--	0.0079 J	< 0.0086	--	0.033 J	0.095
	Calcium	--	2.4	2.4	--	8.7	9.5	--	8.2	14.1
	Chloride	--	2.7	2.8	--	1.8	1.8	--	4.9	7.2
	Fluoride	< 0.050	< 0.050	< 0.050	0.092 J	0.091 J	0.11	< 0.050	< 0.050	0.063 J
	Sulfate	--	< 0.50	< 0.50	--	4.5	5.0	--	12.0	19.2
	Total Dissolved Solids	--	53.0	67.0	--	110	137	--	168	249
Appendix IV	Antimony	0.00032 B	< 0.00028	< 0.00078	0.0013 B	0.0014 J	< 0.00078	< 0.00028	< 0.00028	< 0.00078
	Arsenic	< 0.00078	< 0.00078	< 0.0011	0.0010 J	0.00078 J	< 0.0011	< 0.00078	< 0.00078	< 0.0011
	Barium	0.015	0.015	0.013	0.011	0.011	0.0099	0.027	0.028	0.038
	Beryllium	0.000068 J	0.000068 J	0.000059 J	< 0.000046	< 0.000046	< 0.000054	0.000051 J	< 0.000046	< 0.000054
	Cadmium	< 0.00012	< 0.00012	< 0.00011	0.00041 J	< 0.00012	< 0.00011	0.00019 J	0.00030 J	0.00049 J
	Chromium	0.00056 J	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011
	Cobalt	< 0.00038	< 0.00038	< 0.00039	0.0090	0.0065	0.0068	0.00098 J	0.00071 J	0.0011 J
	Lead	0.000063 J	0.000045 J	< 0.00089	< 0.000036	< 0.000036	< 0.00089	< 0.000036	< 0.000036	< 0.00089
	Lithium	< 0.00081	< 0.00081	< 0.00073	0.0060 J	0.0062 J	0.0057 J	0.0071 J	0.0084 J	0.0082 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074	0.0013 J	0.0014 J	0.0027 J
	Combined Radium - 226/228	0.284 U	0.133 U	0.779 U	1.24	1.20	1.86	0.518 U	0.636 U	0.674 U
	Selenium	< 0.0016	< 0.0016	< 0.0014	< 0.0016	< 0.0016	< 0.0014	< 0.0016	< 0.0016	< 0.0014
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

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Groundwater Analytical Data - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWA-40	YGWA-40	YGWA-40	YGWC-23S	YGWC-23S	YGWC-23S	YGWC-24SA	YGWC-24SA	YGWC-24SA
		2/10/2021	3/4/2021	9/3/2021	2/9/2021	3/4/2021	8/25/2021	2/9/2021	3/3/2021	9/1/2021
Appendix III	pH	5.19	5.23	4.75	5.61	5.44	5.46	5.69	5.70	5.22
	Boron	--	0.078	0.077	--	1.2	1.3	--	< 0.0052	< 0.0086
	Calcium	--	4.6	5.6	--	10.2	10.6	--	2.4	2.3
	Chloride	--	4.9	5.5	--	1.8	2.5	--	8.6	8.9
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	--	21.5	21.3	--	61.7	68.0	--	< 0.50	< 0.50
	Total Dissolved Solids	--	57.0	88.0	--	96.0	141	--	70.0	96.0
Appendix IV	Antimony	< 0.00028	< 0.00028	< 0.00078	0.00052 J	< 0.00028	< 0.00078	< 0.00028	< 0.00028	< 0.00078
	Arsenic	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	< 0.0011
	Barium	0.032	0.032	0.035	0.042	0.043	0.049	0.031	0.025	0.025
	Beryllium	0.00021 J	0.00021 J	0.00024 J	0.00015 J	0.00013 J	0.00019 J	0.00013 J	0.000099 J	0.00014 J
	Cadmium	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011
	Chromium	< 0.00055	< 0.00055	< 0.0011	0.00086 J	0.00078 J	< 0.0011	0.0011 J	< 0.00055	< 0.0011
	Cobalt	< 0.00038	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039
	Lead	< 0.000036	< 0.000036	< 0.00089	< 0.000036	0.00021 J	< 0.00089	0.00036 J	< 0.000036	< 0.00089
	Lithium	< 0.00081	< 0.00081	< 0.00073	0.0026 J	0.0026 J	0.0026 J	< 0.00081	< 0.00081	< 0.00073
	Mercury	< 0.000078	< 0.000078	0.00012 J	0.00015 J	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074
	Combined Radium - 226/228	0.783 U	0.818 U	0.971 U	0.464 U	0.771 U	0.624 U	0.678 U	0.415 U	0.444 U
	Selenium	< 0.0016	< 0.0016	< 0.0014	0.032	0.037	0.032	< 0.0016	< 0.0016	< 0.0014
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

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Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWC-36A	YGWC-36A	YGWC-36A	YGWC-38	YGWC-38	YGWC-38	YGWC-41	YGWC-41	YGWC-41
		2/10/2021	3/4/2021	9/3/2021	2/9/2021	3/4/2021	8/26/2021	2/10/2021	3/4/2021	8/26/2021
Appendix III	pH	6.31	5.67	5.06	5.04	5.01	4.54	4.98	4.69	6.77
	Boron	--	0.0088 J	0.012 J	--	6.4	6.1	--	4.0	3.3
	Calcium	--	5.6	4.1	--	87.0	73.6	--	16.4	12.8
	Chloride	--	6.6	7.0	--	3.9	4.1	--	3.4	3.6
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	--	6.3	13.8	--	356	328	--	117	117
	Total Dissolved Solids	--	69.0	89.0	--	600	562	--	224	225
Appendix IV	Antimony	0.028	0.0015 J	0.0016 J	0.00031 J	< 0.00028	< 0.00078	0.0014 J	< 0.00028	< 0.00078
	Arsenic	0.00088 J	< 0.00078	< 0.0011	0.00098 J	< 0.00078	0.0013 J	< 0.00078	< 0.00078	< 0.0011
	Barium	0.035	0.028	0.038	0.016	0.016	0.016	0.017	0.017	0.018
	Beryllium	0.000099 J	0.00016 J	0.00035 J	0.0029 J	0.0029	0.0028	0.0015 J	0.0015	0.0012
	Cadmium	< 0.00012	< 0.00012	< 0.00011	0.0014 J	0.0013	0.0011	< 0.00012	< 0.00012	< 0.00011
	Chromium	0.00094 J	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011
	Cobalt	0.00038 J	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039
	Lead	0.00051 J	0.00025 J	< 0.00089	< 0.000036	< 0.000036	< 0.00089	0.00020 J	< 0.000036	< 0.00089
	Lithium	0.0011 J	< 0.00081	0.00086 J	0.0067 J	0.0067 J	0.0070 J	0.0021 J	0.0021 J	0.0021 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074
	Combined Radium - 226/228	0.466 U	0.0671 U	0.622 U	0.626 U	0.816 U	0.427 U	0.548 U	1.23	0.356 U
	Selenium	< 0.0016	< 0.0016	< 0.0014	0.073	0.076	0.060	0.033	0.037	0.027
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--

Notes:

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Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWC-42	YGWC-42	YGWC-42	YGWC-43	YGWC-43	YGWC-43	YGWC-49	YGWC-49	YGWC-49
		2/10/2021	3/4/2021	8/25/2021	2/9/2021	3/4/2021	9/27/2021	2/9/2021	3/4/2021	9/1/2021
Appendix III	pH	5.65	5.59	6.73	5.86	5.88	6.08	5.79	5.88	5.15
	Boron	--	14.8	13.5	--	3.6	0.64	--	< 0.0052	< 0.0086
	Calcium	--	90.7	79.9	--	32.2	4.1	--	13.0	12.1
	Chloride	--	2.7	3.4	--	2.1	1.1	--	4.1	4.4
	Fluoride	< 0.050	< 0.050	< 0.050	0.058 J	0.063 J	0.10	< 0.050	< 0.050	< 0.050
	Sulfate	--	537	500	--	328	56.5	--	75.1	79.8
	Total Dissolved Solids	--	501	886	--	592	158	--	145	163
Appendix IV	Antimony	0.00053 J	< 0.00028	< 0.00078	< 0.00028	< 0.00028	< 0.00078	< 0.00028	< 0.00028	< 0.00078
	Arsenic	0.0016 J	< 0.00078	0.0014 J	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	< 0.0011
	Barium	0.031	0.030	0.027	0.041	0.039	0.0097	0.071	0.069	0.066
	Beryllium	0.000057 J	< 0.000046	< 0.000054	0.00053 J	0.00056	0.00015 J	0.00013 J	0.00010 J	0.00012 J
	Cadmium	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012	< 0.00011
	Chromium	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011	0.0020 J	0.0017 J	0.0020 J
	Cobalt	0.0019 J	0.0018 J	0.0014 J	0.0017 J	0.0015 J	<0.00039	< 0.00038	< 0.00038	< 0.00039
	Lead	0.000054 J	< 0.000036	< 0.00089	< 0.000036	< 0.000036	< 0.00089	< 0.000036	< 0.000036	< 0.00089
	Lithium	0.058	0.059	0.053	0.024 J	0.025 J	0.0092 J	0.0038 J	0.0035 J	0.0036 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	0.000090 J	0.00014 J	< 0.000078	< 0.000078
	Molybdenum	0.00094 J	0.00085 J	0.00078 J	0.0012 J	0.0011 J	0.0062 J	< 0.00069	< 0.00069	< 0.00074
	Combined Radium - 226/228	0.612 U	1.02	0.978 U	6.38	6.02	1.54	0.137 U	0.579 U	0.686 U
	Selenium	0.043	0.048	0.043	< 0.0016	< 0.0016	<0.0014	0.0079 J	0.0058	0.0066
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

J: Estimated concentration above the method detection limit and below the reporting

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 6
Groundwater Analytical Data - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	PZ-35	PZ-35	PZ-35	PZ-37	PZ-37	PZ-37	PZ-37D	PZ-37D	PZ-51	PZ-52D
		2/10/2021	3/4/2021	9/1/2021	2/9/2021	3/4/2021	8/25/2021	5/13/2021	9/3/2021	11/17/2021	11/4/2021
Appendix III	pH	5.58	5.64	6.82	5.42	5.51	5.48	7.79	7.44	6.15	6.62
	Boron	--	0.012 J	0.044	--	12.4	10.3	1.3	1.6	--	0.69
	Calcium	--	4.4	7.9	--	118	106	68.3	64.0	--	25.6
	Chloride	--	6.7	6.3	--	3.9	7.0	4.0	7.1	--	9.5
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.12	0.15	--	0.10
	Sulfate	--	8.8	38.7	--	485	472	178	153	--	191
	Total Dissolved Solids	--	59.0	128	--	856	876	381	374	--	426
Appendix IV	Antimony	< 0.00028	0.00039 J	< 0.00078	0.00035 J	< 0.00028	< 0.00078	0.00052 J	< 0.00078		<0.00078
	Arsenic	0.00096 J	< 0.00078	< 0.0011	0.0015 J	< 0.00078	0.0014 J	< 0.00078	< 0.0011	--	0.0019 J
	Barium	0.032	0.033	0.067	0.036	0.036	0.035	0.015	0.015	--	0.026
	Beryllium	0.00025 J	0.00025 J	0.00045 J	0.00029 J	0.00017 J	0.00059	< 0.000046	< 0.000054	--	<0.000054
	Cadmium	< 0.00012	< 0.00012	< 0.00011	0.00042 J	0.00028 J	0.00094	< 0.00012	< 0.00011	--	<0.00011
	Chromium	0.00060 J	0.00070 J	< 0.0011	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.0011	--	<0.0011
	Cobalt	< 0.00038	< 0.00038	< 0.00039	0.0023 J	0.0030 J	0.0068	< 0.00038	< 0.00039	--	0.00082 J
	Lead	0.000087 J	0.00015 J	< 0.00089	0.000088 J	< 0.000036	< 0.00089	0.000049 J	< 0.00089	--	0.0010
	Lithium	0.0012 J	0.0015 J	0.0019 J	0.024 J	0.028 J	0.023 J	0.011 J	0.013 J	0.0049J	0.016 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	--	<0.000078
	Molybdenum	< 0.00069	< 0.00069	< 0.00074	0.0016 J	0.0024 J	0.0011 J	0.0042 J	0.0018 J	--	0.012
	Combined Radium - 226/228	0.546 U	0.397 U	0.696 U	1.52	1.49	1.41	5.36	3.18	--	0.721 U
	Selenium	< 0.0016	< 0.0016	0.0016 J	0.28	0.27	0.20	< 0.0016	< 0.0014	--	0.0034 J
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

J: Estimated concentration above the method detection limit and below the reporting

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 6
Groundwater Analytical Data - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YAMW-1	YAMW-1	YAMW-1	YAMW-2	YAMW-2	YAMW-2	YAMW-3	YAMW-3	YAMW-4	YAMW-4
		2/9/2021	3/3/2021	9/1/2021	2/9/2021	3/3/2021	9/1/2021	11/17/2021	12/9/2021	2/9/2021	3/3/2021
Appendix III	pH	6.42	6.51	5.97	5.81	5.67	6.67	6.01	5.92	6.89	6.81
	Boron	--	0.039 J	0.18	--	0.032 J	0.017 J	--	--	--	0.81
	Calcium	--	6.9	16.8	--	1.5	1.4	--	--	--	20.6
	Chloride	--	6.1	5.7	--	2.5	2.6	--	--	--	22.9
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--	--	0.14	0.14
	Sulfate	--	16.9	94.7	--	7.9	8.3	--	--	--	91.7
	Total Dissolved Solids	--	121	219	--	40.0	60.0	--	--	--	245
Appendix IV	Antimony	0.00037 J	0.025	0.0024 J	< 0.00028	< 0.00028	< 0.00078	--	--	0.0011 J	0.00062 J
	Arsenic	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	< 0.0011	--	--	0.0010 J	0.00079 J
	Barium	0.039	0.035	0.075	0.0085 J	0.0082	0.0072	--	--	0.020	0.021
	Beryllium	< 0.000046	< 0.000046	0.000095 J	0.000051 J	< 0.000046	0.000065 J	--	--	< 0.000046	< 0.000046
	Cadmium	0.00013 J	< 0.00012	0.00023 J	< 0.00012	< 0.00012	< 0.00011	--	--	< 0.00012	< 0.00012
	Chromium	0.0010 J	0.00076 J	< 0.0011	0.0011 J	0.0012 J	0.0030 J	--	--	0.00057 J	< 0.00055
	Cobalt	0.030	0.018	0.022	0.0010 J	0.00082 J	0.00093 J	--	--	0.00063 J	0.0010 J
	Lead	0.00019 J	< 0.000036	< 0.00089	0.00011 J	0.000080 J	< 0.00089	--	--	0.00054 J	0.000096 J
	Lithium	0.021 J	0.022 J	0.013 J	< 0.00081	< 0.00081	< 0.00073	0.046	0.043	0.018 J	0.020 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	--	--	< 0.000078	< 0.000078
	Molybdenum	0.0038 J	0.0037 J	0.0014 J	< 0.00069	< 0.00069	< 0.00074	--	--	0.0068 J	0.0049 J
	Combined Radium - 226/228	0.866 U	0.377 U	0.676 U	0.492 U	0.563 U	0.761 U	--	--	0.659 U	1.07
	Selenium	< 0.0016	< 0.0016	0.0027 J	< 0.0016	< 0.0016	< 0.0014	--	--	< 0.0016	< 0.0016
	Thallium	< 0.00014	--	--	< 0.00014	--	--	--	--	< 0.00014	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

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Table 6
Groundwater Analytical Data - 2021
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YAMW-4	YAMW-5	YAMW-5	YAMW-5
		8/25/2021	2/9/2021	3/4/2021	8/26/2021
Appendix III	pH	6.79	5.37	5.32	5.35
	Boron	2.8	--	6.1	5.9
	Calcium	11.0	--	53.8	45.0
	Chloride	1.5	--	3.7	3.9
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	164	--	340	338
	Total Dissolved Solids	332	--	604	570
Appendix IV	Antimony	< 0.00078	< 0.00028	< 0.00028	< 0.00078
	Arsenic	< 0.0011	0.00095 J	< 0.00078	< 0.0011
	Barium	0.0037 J	0.042	0.039	0.036
	Beryllium	< 0.000054	0.00015 J	0.00013 J	0.00012 J
	Cadmium	< 0.00011	0.00025 J	0.00018 J	0.00021 J
	Chromium	< 0.0011	< 0.00055	< 0.00055	< 0.0011
	Cobalt	0.00041 J	< 0.00038	< 0.00038	< 0.00039
	Lead	< 0.00089	0.000073 J	0.000041 J	< 0.00089
	Lithium	0.033	0.016 J	0.016 J	0.015 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	0.0081 J	< 0.00069	< 0.00069	< 0.00074
	Combined Radium - 226/228	0.0991 U	1.07 U	1.46	0.724 U
	Selenium	0.019	0.060	0.061	0.055
	Thallium	--	< 0.00014	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

J: Estimated concentration above the method detection limit and below the reporting

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
2021 Annual Groundwater Monitoring and Corrective Action Report
Plant Yates - AP-3, A, B, B' and R6 CCR Landfill

Constituent	Units	Background	Federal GWPS	State GWPS
March 2021 (AP-3, A, B, B', R6 Landfill)				
Antimony	mg/L	0.0047	0.006	0.006
Arsenic	mg/L	0.005	0.010	0.010
Barium	mg/L	0.071	2	2
Beryllium	mg/L	0.0005	0.004	0.004
Cadmium	mg/L	0.0005	0.005	0.005
Chromium	mg/L	0.0093	0.100	0.100
Cobalt	mg/L	0.035	0.035 [3]	0.035 [3]
Fluoride	mg/L	0.680	4	4
Lead	mg/L	0.0013	0.015	0.0013
Lithium	mg/L	0.030	0.040	0.030
Mercury	mg/L	0.0002	0.002	0.002
Molybdenum	mg/L	0.014	0.100	0.014
Selenium	mg/L	0.005	0.050	0.050
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.92	6.92 [3]	6.92 [3]
August/September 2021 (AP-3, A, B, B', R6 Landfill)				
Antimony	mg/L	0.0047	0.006	0.006
Arsenic	mg/L	0.005	0.010	0.010
Barium	mg/L	0.071	2	2
Beryllium	mg/L	0.0005	0.004	0.004
Cadmium	mg/L	0.0005	0.005	0.005
Chromium	mg/L	0.0093	0.100	0.100
Cobalt	mg/L	0.035	0.035 [3]	0.035 [3]
Fluoride	mg/L	0.680	4	4
Lead	mg/L	0.0013	0.015	0.0013
Lithium	mg/L	0.030	0.040	0.030
Mercury	mg/L	0.0002	0.002	0.002
Molybdenum	mg/L	0.014	0.100	0.014
Selenium	mg/L	0.005	0.050	0.050
Thallium	mg/L	0.001	0.002	0.002
Combined Radium - 226/228	pCi/L	6.92	6.92 [3]	6.92 [3]

Notes:

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

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

3. 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:

mg/L = millgrams per liter

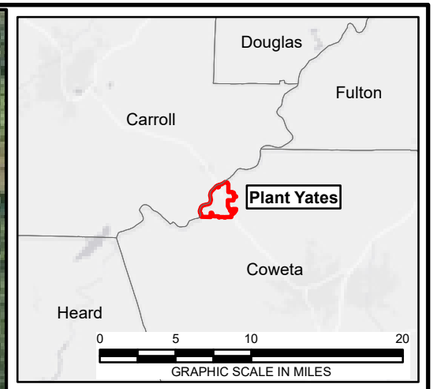
pCi/L = picocuries per liter

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

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 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

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

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA
2021 ANNUAL 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
PZ-53
YGWC-46A
PZ-10I
PZ-10S
GWC-2R
GWC-4R
GWC-1R
GWC-6R
GWC-3R
GWC-5R
GWA-2
FORMER GYPSUM STACK LANDFILL
YGWA-6I
YGWA-6S
PZ-06D
PZ-48
FORMER ASH POND A
YGWC-49
YGWC-26S
YGWC-26I
AP-2 WEST
YGWC-27S
YGWC-27I
YGWC-28S
YGWC-28I
YGWC-29I
ASH POND 2
YGWA-30I
AP-2 AMAX COVE
PZ-31S
YGWC-24SA
PZ-25I
PZ-25S
PZ-24IA
PZ-35
YAMW-1
YGWC-36A
ASH POND B
AMA - PERIMETER ROAD
ASH POND B'
PZ-13S
PZ-13I
YGWA-14S
PZ-14I
PZ-51
YGWC-43
YGWA-17S
R6 ASH DISPOSAL AREA
YGWA-18S
YGWA-18I
YGWA-1I
YGWA-1D
PZ-01S
YAMW-2
YAMW-3
YGWC-42
YAMW-4
YGWC-41
ASH POND 3
EAST COVE
PZ-37D
PZ-37
PZ-53D
YGWC-23S
PZ-52D
YAMW-5
PZ-03S
YGWA-3I
YGWA-3D
YGWA-2I
YGWC-38
ASH MANAGEMENT AREA
YGWA-40
YGWA-39
YGWA-21I
YGWA-20S
SOUTH COVE
PZ-04S
YGWA-4I
YGWA-5I
YGWA-5D
PZ-05S

LEGEND

- SAPROLITE NETWORK MONITORING WELL LOCATION
- TRANSITION NETWORK MONITORING WELL LOCATION
- BEDROCK NETWORK MONITORING WELL LOCATION
- SAPROLITE NON-NETWORK WELL/PIEZOMETER
- TRANSITION NON-NETWORK WELL/PIEZOMETER
- BEDROCK NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY
- AREA WHERE ASH HAS BEEN CERTIFIED REMOVED AS OF 1/31/2022

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

0 450 900 1,800
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power
PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLANT YATES CCR REMOVAL AREAS

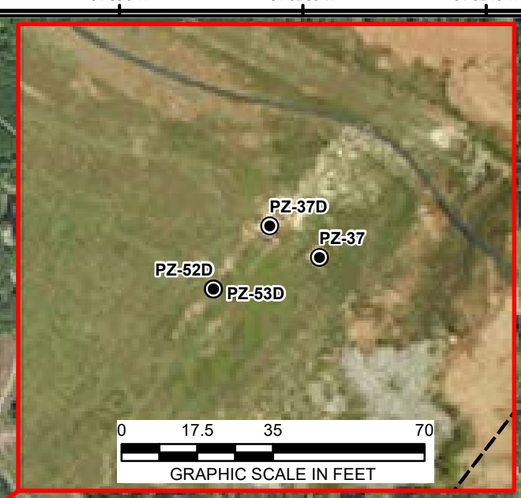
ARCADIS

FIGURE
2

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

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-6S
PZ-06D
YGWA-6I
PZ-48
YGWC-49
FORMER ASH POND A
ASH POND 2
PZ-24IA
YGWC-24SA
YAMW-1
PZ-35
YGWC-36A
ASH POND B
ASH POND B'
YGWA-17S
PZ-51
YGWC-43
R6 ASH DISPOSAL AREA
YGWA-18S
YGWA-18I
YAMW-2
YAMW-3
YGWC-42
YAMW-4
YGWC-41
PZ-37
PZ-37D
PZ-52D
PZ-53D
YGWC-23S
ASH POND 3
YAMW-5
YGWC-38
ASH MANAGEMENT AREA
YGWA-40
YGWA-39
YGWA-21I
YGWA-20S
YGWA-4I
PZ-04S
PZ-05S
YGWA-5D
YGWA-5I



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

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

0 350 700 1,400
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power
PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

ARCADIS

FIGURE
3

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

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

740 750 760 770 730 720 710 710 720 730 740 750 760 770 780 790 800 800 790 780

YGWA-6S 764.93
PZ-06D 760.30
YGWA-6I 763.83
PZ-48 780.09
YGWC-49 751.01
FORMER ASH POND A
PZ-24IA 736.08
YGWC-24SA 737.00
ASH POND 2
PZ-35 732.56
YAMW-1 732.76
YGWC-36A 731.30
ASH POND B
ASH POND B'
YGWA-17S 771.20
PZ-51 736.94
YGWC-43 728.60
R6 ASH DISPOSAL AREA
YGWA-18S 771.02
YGWA-18I 767.67
YAMW-2 760.25
YAMW-3 760.59
YGWC-42 769.67
ASH POND 3
YAMW-4 774.50
YGWC-41 776.48
PZ-37 746.40
YGWC-23S 747.44
YGWC-38 768.78
YAMW-5 775.42
ASH MANAGEMENT AREA
YGWA-40 792.80
YGWA-39 800.82
YGWA-21I 756.10
YGWA-20S 755.93
PZ-04S 760.12
PZ-05S 765.95
YGWA-4I 761.59
YGWA-5I 765.79
YGWA-5D 762.76

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
- 736.94 GROUNDWATER ELEVATION (FEET)

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 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

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

0 350 700 1,400
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP FEBRUARY 2021

ARCADIS

FIGURE **4**

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

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

740 750 760 770 730 720 710 710 720 730 740 750 760 770 780 790 800 800 790 780

PZ-06D 760.80
YGWA-6S 764.60
YGWA-6I 764.48
PZ-48 780.48
YGWC-49 751.23
FORMER ASH POND A
PZ-24IA 736.65
YGWC-24SA 737.55
ASH POND 2
PZ-35 732.67
YAMW-1 733.03
YGWC-36A 730.86
ASH POND B
ASH POND B'
YGWA-17S 771.67
PZ-51 737.32
YGWC-43 728.81
R6 ASH DISPOSAL AREA
YGWA-18S 771.63
YGWA-18I 768.16
YAMW-3 761.47
YGWC-42 770.32
YAMW-2 761.29
YAMW-4 775.27
YGWC-41 777.04
PZ-37 746.40
YGWC-23S 747.44
ASH POND 3
YGWC-38 768.78
YAMW-5 775.87
YGWA-40 793.34
YGWA-39 801.53
ASH MANAGEMENT AREA
YGWA-21I 756.10
YGWA-20S 755.84
YGWA-4I 762.09
PZ-04S 760.51
PZ-05S 766.50
YGWA-5I 766.35
YGWA-5D 762.65

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
- **773.31** GROUNDWATER ELEVATION (FEET)

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 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

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

0 350 700 1,400
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP MARCH 2021

ARCADIS

FIGURE **5**

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

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

740 750 760 770 730 720 710 710 720 730 740 750 760 770 780 790 800 800 790 780

PZ-06D 759.71
YGWA-6S 763.55
YGWA-6I 778.68
PZ-48 779.33
YGWC-49 750.84
FORMER ASH POND A
PZ-24IA 735.51
YGWC-24SA 736.79
ASH POND 2
PZ-35 730.77
YAMW-1 731.10
YGWC-36A 728.28
ASH POND B
ASH POND B'
YGWA-17S 769.75
YGWA-18S 769.84
YGWA-18I 766.63
PZ-51 734.24
YGWC-43 722.27
R6 ASH DISPOSAL AREA
YAMW-2 758.75
YAMW-3 759.93
YGWC-42 769.24
YAMW-4 774.14
YGWC-41 776.24
ASH POND 3
PZ-37 749.04
PZ-37D 755.26
YGWC-23S 748.23*
YGWC-38 769.94
YAMW-5 776.20
ASH MANAGEMENT AREA
YGWA-40 792.55
YGWA-39 801.56
YGWA-21I 762.20**
YGWA-20S 756.04
YGWA-4I 760.89
PZ-04S 759.46
PZ-05S 765.09
YGWA-5I 764.97
YGWA-5D 762.30

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
- **728.28** GROUNDWATER ELEVATION (FEET)

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 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

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

6. GROUNDWATER ELEVATIONS COLLECTED ON AUGUST 16 & 17, 2021.

7. * - WELLS INACCESSIBLE DURING GAUGING EVENT DUE TO TROPICAL STORM. GROUNDWATER ELEVATION COLLECTED ON AUGUST 25, 2021 AND NOT USED IN CONTOURING.

8. ** – NOT USED FOR CONTOURING, TRANSDUCER READING USED FOR GROUNDWATER ELEVATION DUE TO MONITORING WELL ACCESSIBILITY ISSUES DURING GAUGING ACTIVITIES.

0 350 700 1,400
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

GROUNDWATER ELEVATION MAP AUGUST 2021

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FIGURE **6**

Appendix A

Semiannual Remedy Selection and Design Progress Report

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Georgia Power

Semiannual Remedy Selection and Design Progress Report

Plant Yates – AP-3, A, B, B'/R6 CCR Landfill
Newnan, Georgia

January 31, 2022

Semiannual Remedy Selection and Design Progress Report

Plant Yates – AP-3, A, B, B'/R6 CCR Landfill, Newnan, Georgia

January 31, 2022

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Prepared For:
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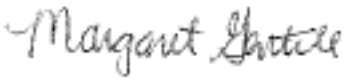
Jennifer Beck
Senior Scientist



Margaret Gentile, Ph.D.
Technical Expert

Geoffrey Gay
Georgia Registration No. 27801
Technical Expert (Eng)
Project Manager

Contents

Tables

Figures

Attachments

Acronyms and Abbreviations

ACC	Atlantic Coast Consulting, Inc.
ACM	Assessment of Corrective Measures
AMA	Ash Management Area
amsl	above mean sea level
AP	Ash Pond
AP-3	Ash Pond 3
AP-A	Ash Pond A
AP-B	Ash Pond B
AP-B’	Ash Pond B’
ash ponds	Ash Ponds 3, A, B, B’
bgs	below ground surface
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
CSM	conceptual site model
ft	feet
GAEPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
GWPS	Groundwater Protection Standard
ISS	In Situ Stabilization/Solidification
mg/L	milligram per liter
MNA	monitored natural attenuation
MODFLOW-USGT	Modular Three-Dimensional Finite-Difference Unstructured Grid Transport
NADV88	North American Vertical Datum 1988
SSL	statistically significant level
TDS	total dissolved solids
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

Professional Certification

This Semiannual Remedy Selection and Design Progress Report, Georgia Power Company – Plant Yates, Ash Ponds 3, A, B, B' and the R6 Landfill, has been prepared in accordance with the United States Environmental Protection Agency coal combustion residual rule, specifically 40 Code of Federal (CFR) 257.97(a) and the Georgia Environmental Protection Division Rules for Solid Waste Management 391-3-4-.10(6)(a). This report describes the progress made during the second semiannual period of 2021 in selecting and designing a remedy previously documented in the Assessment of Corrective Measures Report – Plant Yates Ash Ponds 3, A, B, B' (ACC 2019).

1.31.22

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

Date

1 Introduction

In accordance with the United States Environmental Protection Agency (USEPA) coal combustion residual (CCR) Rule (40 Code of Federal Regulations [CFR] 257 Subpart D; published in 80 FR 21302-21501, April 17, 2015; CCR Rule or The Rule), and on behalf of the Georgia Power Company (Georgia Power), this Semiannual Remedy Selection and Design Progress Report (Semiannual Progress Report) has been prepared for Plant Yates; Ash Ponds 3, A, B, and B' (ash ponds); and the R6 CCR Landfill (collectively, the site) pursuant to 40 CFR § 257.97(a) and Georgia Environmental Protection Division (GAEPD) Rule 391-3-4.10(6)(a). To support the evaluation of potential remedies, this Semiannual Progress Report documents activities completed at the site since the August 2021 submittal of the Semiannual Remedy Selection and Design Progress Report (Arcadis 2021).

1.1 Site Description

The general site description provided in this section is modified from the 2021 Semiannual Groundwater Monitoring and Corrective Action Report (Arcadis 2022). The site is located at 708 Dyer Road on the east bank of the Chattahoochee River in Coweta County, Georgia, near the Coweta and Carroll County line, approximately 8 miles northwest of the city of Newnan and 13 miles southeast of the city of Carrollton. A general site layout is shown in **Figure 1**. Plant Yates was once a coal-fired power generating facility but was converted to natural gas combustion turbines in 2014. Plant Yates was built after World War II and originally had seven coal-fired steam generating units (Units 1 – 7). Units 1 through 5 were retired in 2015 following approval by the Georgia Public Service Commission through the company's 2013 Integrated Resource Plan. The two largest units (Units 6 and 7) were converted from coal to natural gas and remain in service. Plant Yates is comprised of multiple CCR units which are in the process of closing in accordance with federal and state regulations. Ash Ponds 3, A, B, and B' (ash ponds); and the R6 CCR Landfill are the subject of this Remedy Selection and Design Progress Report.

Plant Yates is located within 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. A thin layer of soil from 1 to 2 feet (ft) thick overlies a thick layer of saprolite. The saprolite, which extends to typical depths of 20 to 40 ft below ground surface (bgs), was formed in-place by the physical and chemical weathering of the underlying metamorphic rocks. A zone of variable thickness (approximately 5 to 20 ft) of transitionally weathered rock typically exists between the saprolite and competent bedrock. 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.

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. 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.

Pursuant to 40 CFR § 257.91, a multi-unit groundwater monitoring system was installed within the uppermost aquifer at the site (**Figure 2**). The multi-unit monitoring system is designed to monitor groundwater passing the

waste boundary of the CCR units within the uppermost aquifer. Wells are located to monitor upgradient and downgradient conditions based on groundwater flow direction.

1.2 Summary of SSLs for Corrective Measures

The current Assessment of Corrective Measures (ACM; Atlantic Coast Consulting [ACC] 2019) was placed in the site's operating record and posted to the site's CCR Rule Compliance website. To support the ACM and development of the remedy selection, this Semiannual Progress Report summarizes the constituents determined to be present at statistically significant levels (SSLs). SSLs were determined for the following locations and constituents (**Figure 2**) in this semiannual reporting period:

- YGWC-38 (beryllium and selenium) at the R6 CCR Landfill. Results from recent sampling and analysis have shown that beryllium concentrations have decreased and no longer exceed the GWPS at YGWC-38, while the statistical analysis of the historical dataset continues to identify an SSL.
- YGWC-42 (lithium) at the R6 CCR Landfill. Results from recent sampling and analysis have shown an increase of lithium concentrations above the state GWPS.
- PZ-37 (selenium) at the R6 CCR Landfill.

Iso-concentration maps for selenium and lithium are provided on **Figure 3A** and **Figure 3B**, respectively**.** Stratigraphic cross-sections with current water level data are depicted in **Figures 4** through **6**. Recent delineation well data are provided in **Table 1.** Beryllium and selenium SSLs are horizontally and vertically delineated. The state lithium SSL is horizontally delineated and data from the vertical delineation well (YAMW-3) is under evaluation. If results from future sampling of YAMW-3 are not below the GWPS, a deeper delineation well will be installed near YGWC-42. Additional detail regarding work to define the nature and extent of site SSLs is provided in Section 3.2. These locations will continue to be monitored until an adequately sized data set is available to complete statistical analyses.

There are several historical SSLs that are no longer present at the site:

- Monitoring well YGWC-41 historically exhibited an SSL for selenium. Concentrations of selenium have decreased to less than the GWPS and the statistical analysis of the historical data set no longer indicates an SSL. YGWC-41 will continue to be listed in the remedy selection and design progress reports and considered in the assessment of corrective measures.
- Historically, YGWC-33S in the ash pond area yielded SSLs for beryllium and cobalt. This monitoring location was abandoned in June 2020 because it was not suitable for detecting groundwater flow away from the combined ash ponds and R6 CCR Landfill waste boundary. Prior to its abandonment, beryllium and cobalt were shown to be delineated by downgradient wells within the permitted unit boundary by YGWC-36A, YAMW-1 and PZ-35. The delineation wells continue to be monitored as part of the combined network at the ash ponds and R6 CCR Landfill. Cobalt will continue listed in the remedy selection and design progress reports and considered in the assessment of corrective measures through August 2023, which will constitute three years following the last SSL for cobalt in August 2020.

In addition to the assessment monitoring program at the site, a human health and ecological risk evaluation was completed (and reported in Wood 2020) to evaluate constituents present at SSLs in groundwater (i.e., beryllium

and selenium) at the ash ponds and the R6 CCR Landfill. The evaluation provides one of many lines of evidence that will be evaluated and factored into the remedy selection process, which will be completed in accordance with § 257.97. Based on this risk evaluation, concentrations of beryllium and selenium detected in groundwater at the site between August 2016 and March 2020 are not expected to pose a risk to human health or the environment (Wood 2020). Beryllium and selenium data collected since March 2020 are consistent with data used in the risk evaluation; therefore, the conclusions provided in the *2020 Risk Evaluation Report* are supported by current conditions for those constituents. The risk evaluation will be updated to include lithium, and the results will be submitted with the Remedy Selection Report.

As requested by EPD, an updated survey of water wells was conducted within a two-mile radius from the site. The survey incorporated records from federal, state, and county sources cited in the previous well survey (NewFields 2020); however, no information was received from the Coweta County Health Department. A current Environmental Data Resources (EDR) GeoCheck® Report is included in **Attachment 1**. The findings are consistent with the 2020 well survey with the addition of three wells identified in Carroll County that were inadvertently omitted from the NewFields report (parcel IDs 200006, W030020105, and 2020001)**.** The three wells are separated from the Yates site by the Chattahoochee River which provides a groundwater hydrologic divide. Beryllium and selenium data collected since March 2020 are consistent with data used in the risk evaluation; therefore, the conclusions provided in the 2020 Risk Evaluation Report are supported by current conditions. The risk evaluation will be updated and provided in the final Remedy Selection report.

2 Screening of Corrective Measures

Pursuant to 40 CFR § 257.97, Georgia Power is evaluating the potential corrective measures presented in the ACM to identify an appropriate remedy or combination of remedies for the site as soon as feasible.

The ACM presented the following corrective measures as potentially feasible for use at the site:

1. Geochemical Manipulation (In-Situ Injection);
2. Hydraulic Containment (Pump and Treat);
3. In Situ Stabilization/Solidification (ISS);
4. Monitored Natural Attenuation (MNA);
5. Subsurface Vertical Barrier Walls;
6. Permeable Reactive Barrier;
7. Phytoremediation.

This evaluation was first completed and reported in the August 2020 Semiannual Progress Report (Arcadis 2020). Building on the initial evaluation of corrective measures presented in the ACM; incorporation of site-specific hydrogeological and geochemical information; and consideration of ease of implementation, performance, and reliability of each, potential corrective measures were screened to further refine the list to be retained for additional evaluation. The list of retained potential corrective measures is presented in this Semiannual Progress Report as **Table 2** and includes:

1. Geochemical Manipulation (In-Situ Injection);

2. Hydraulic Containment (Pump and Treat);
3. MNA; and
4. Phytoremediation (not currently applicable but retained if needed for future compliance well SSLs downgradient of AP-A/B/B'/3 or R6 CCR Landfill).

Georgia Power proactively initiated adaptive site management as outlined in the ACM Report (ACC 2019) to support the groundwater remedy selection process and address potential changes in site conditions as appropriate during the ash pond closure. The adaptive site management approach will take existing site conditions, including natural attenuation mechanisms into account. Characterization activities to evaluate attenuation mechanisms at the site may include collection of data necessary to progressively evaluate the existing and long-term effectiveness of these processes in the aquifer and reduce uncertainty for decision making at each screening step as listed in the USEPA guidelines for MNA (USEPA 2007, 2015). In 2007, the USEPA issued MNA technical guidance specific to inorganic contaminants (USEPA, 2007) that contained four "tiers." The 2015 MNA guidance retains these four "tiers," but describes them as "phases" as described below (USEPA, 2015). This 2015 MNA document for inorganic contaminants expands on and is designed to be a companion to the 1999 MNA guidance.

- Phase I: Demonstration that the groundwater plume is *not expanding*.
- Phase II: Determination that the *mechanism and rate* of the attenuation process are sufficient.
- Phase III: Determination that the *capacity* of the aquifer is sufficient to attenuate the mass of contaminant within the plume and the *stability* of the immobilized contaminant is sufficient to resist re-mobilization.
- Phase IV: Design of a *performance monitoring program* based on an understanding of the mechanism of the attenuation process, and establishment of contingency remedies tailored to site-specific characteristics.

Georgia power will address Phase IV as appropriate during the development of the future corrective action monitoring plan, after the final remedy selection report.

3 Summary of Work Completed and Data Analysis

3.1 Closure Activities

Source control is being implemented as part of the closure process and is not specifically intended as a corrective measure. However, there is a strong potential for source control to limit future impact and improve groundwater quality. The following source control measures are underway or complete for the ash ponds and the R6 CCR Landfill:

- R6 CCR landfill capping began in October 2015 and was completed during the fourth quarter of 2016. Final closure certification has not been submitted for the R6 CCR landfill due to final flume tie-in to the surface water drainage ditch currently being constructed along the northern edge of the R6 CCR landfill.
- Consolidation of ash from the ash ponds onto the Ash Management Area (AMA) began in 2014 and is on-going.

Closure activities at Plant Yates, including management and reduction of ponded water, excavation and consolidation of CCR, and capping, can reduce CCR impacts to groundwater. The removal of ponded water at AP-B and excavation and consolidation of the material at AP-A, AP-B, and other areas reduces potential contact of groundwater with the source of CCR constituents and likely results in improved groundwater quality in the area. Capping of the R6 CCR Landfill and future capping of the consolidated ash pond materials in the AMA also minimizes the infiltration of water through CCR materials.

3.2 Nature and Extent Delineation

New field investigations were completed during the reporting period (August – November) to vertically delineate the nature and extent of selenium near well PZ-37 and spatially delineate lithium downgradient of well YGWC-42. The field investigations focused on collecting detailed information on the occurrence, distribution, and geologic features affecting the transport of selenium in the deeper groundwater system, and spatially characterizing the occurrence of the lithium through supplemental sampling of delineation wells PZ-51 and YAMW-3.

3.2.1 Vertical Delineation of Selenium in Groundwater

To delineate the vertical extent of selenium concentrations observed previously through discrete interval sampling during installation of well PZ-37D, a deep bedrock boring, BH-52, was drilled during August-September 2021. The boring was also used to characterize the structural features in the bedrock using borehole geophysical tools. The borehole was drilled to a total depth of 200 feet below ground surface (bgs). Core samples from the borehole were logged for lithologic properties. Well construction and development information is provided in Appendix C of the 2021 Semiannual Groundwater Monitoring and Corrective Action Report (Arcadis 2022).

After reaching total depth, Arcadis collected borehole geophysical logs using a portable Matrix system manufactured by the Mount Sopris Instrument Company in Golden, Colorado.

The geophysical probes utilized included:

1. Fluid Temperature/Resistivity probe;
2. Three-Arm Caliper probe;
3. Acoustic Televiewer probe;
4. Optical Televiewer probe; and
5. Vertical Flow/Heat Pulse Flow probe;

Data from these probes were collected in a near-continuous manner in the borehole from the ground surface to approximately 200 feet bgs at a near-constant speed ranging from 5 to 15 feet per minute, depending on the probe.

The final borehole logs are included on the compiled geophysical log of BH-52, which is presented in in the geophysical test technical memorandum in **Attachment 2**. In addition to the compiled geophysical log of BH-52, the acoustic televiewer log, optical televiewer log, and heat pulse flow data were included in the structural log interpretation of BH-52, which is also included in **Attachment 2**. Foliations and fractures were identified from the acoustic and optical televiewer data as sinusoidal features. Those features with a with low amplitude acoustic

televiewer response, in combination with the heat pulse flow data and changes in borehole diameter based on the caliper log, were interpretated as potentially open fractures.

Packer testing was conducted on specified intervals based on the results of the geophysical logging and identified fracture zones. Identified zones for testing included 82 feet to 92 feet, 113 feet to 123 feet, and 150 feet to 160 feet bgs. Each identified fracture zone was isolated using a 10 ft staddle packer assembly and a sample was collected. The drilling contractor inflated the packers using compressed air and monitored the pressures throughout the test. A 2-inch submersible pump was then deployed into the riser.

After the packers were set, inflated, and pump deployed, the water-level inside and outside the riser was measured. Additionally, water levels were measure in the surrounding monitoring wells, PZ-37 and PZ-37D. Pumping was initiated at each interval at rates ranging from 250 to 500 milliliters per minute (mL/min). Groundwater samples were collected from each interval in laboratory provided containers and sent under chain of custody measures and analyzed for boron, selenium, sulfate, and lithium by Pace Labs, Norcross, GA. In general, concentrations of boron and lithium decrease with increasing depth and selenium concentrations were below detection for all intervals tested.

After the completion of geophysical logging and packer testing, two monitoring wells were installed in the BH-52 borehole (well PZ-52D and PZ-53D) to delineate the nature and extent of selenium and support the understanding of groundwater conditions in the vicinity of PZ-37, PZ-37D, YGWC-38, and YAMW-5 (**Figure 5**). PZ-52D was screened from 82 to 92 feet bgs and PZ-53D was screened from 150 to 160 feet bgs using flush-threaded polyvinyl chloride (PVC) well construction materials. The well installation procedures and specifications are provided in Appendix C to the 2021 Semiannual Groundwater Monitoring and Corrective Action Report (Arcadis 2022). Analytical laboratory results from the newly installed PZ-52D are provided in Table 1. Concentrations of Appendix III and Appendix IV constituents were less than the GWPS. PZ-52D will continue to be monitored to provide additional support for delineation of constituents and remedy selection. Since the vertical extent of selenium is delineated by well PZ-52D, the deeper well PZ-53D will be used for water level monitoring and not for routine sampling.

3.2.2 Horizontal and Vertical Delineation of Lithium in Groundwater

Groundwater samples were collected and analyzed for lithium in two wells, PZ-51 and YAMW-3. Well PZ-51 is located about 700 feet downgradient of YGWC-42 and well YAMW-3 is located adjacent to YGWC-42. PZ-51 and YAMW-3 are screened approximately 20.10 and 23.50 feet below the bottom of YGWC-42, respectively. The lithium concentration at PZ-51 was 0.0049 mg/L, less than the state GWPS of 0.03 mg/L and the federal GWPS of 0.04 mg/L, providing delineation in the downgradient direction. The concentration of lithium at delineation well YAMW-3 (0.046 mg/L) exceeded the state GWPS and was slightly above the federal GWPS.

Results from the 2021 groundwater sampling events indicate that horizontal delineation is complete: Lithium concentrations in the horizontal delineation wells are below the relevant GWPS. However, the current Appendix IV data set for these wells is limited to less than four independent sampling events which is the required minimum number to construct confidence intervals to statistically evaluate the results with respect to GWPSs. Georgia Power will continue to monitor these wells until an adequately sized data set is available to complete statistical analyses. Additional data will be collected to evaluate the vertical delineation of lithium in this area. The evaluation of corrective measures has been updated in response to the new lithium SSL in Section 4.

3.3 Trend Analysis

Historical groundwater analytical data (through August 2021) are presented in **Figures 7 to 11** to illustrate how groundwater conditions are changing in conjunction with closure activities. Groundwater monitoring has been performed for the ash ponds since 2016 and the R6 CCR landfill since 2017. Based on EPD guidance, wells with SSLs were further evaluated by Groundwater Stats Consulting (GSC) using the Sen's Slope/Mann Kendall trend tests (**Attachment 3**). The full report generated from the analyses is provided in Appendix E of the 2021 Annual Groundwater Monitoring and Corrective Action Report (Arcadis 2022). Statistically significant trends were identified for the following well/constituent pairs in which the current concentration exceeds the applicable GWPS (from Appendix E to the 2021 Semiannual Groundwater Monitoring and Corrective Action Report, Arcadis 2022):

- Increasing trends:
  - Lithium: YGWC-42
- Decreasing Trends:
  - Selenium: YGWC-38
  - Beryllium: YGWC-38

In the R6 CCR Landfill area, decreasing concentration trends are observed on the east side of the unit at YGWC-38 (**Figure 7**). At this location, concentrations of boron, sulfate, and total dissolved solids (TDS) have been decreasing through time, with concentrations of chloride and pH values remaining stable. For example, boron concentrations decreased from 22.7 milligrams per liter (mg/L) in June of 2018 to 6.1 mg/L in August 2021. The concentration data (**Figure 7**) indicate target Appendix III constituent concentrations that are indicators for CCR constituents in groundwater are also decreasing near YGWC-38. Beryllium has decreased from a maximum of 0.0059 mg/L in June 2018 to 0.0028 mg/L in August 2021, less than the GWPS of 0.004 mg/L. Because concentrations of beryllium at YGWC-38 do not exceed the GWPS of 0.004 mg/L, a beryllium isoconcentration map was not developed. Selenium concentrations in YGWC-38 have also decreased from 0.265 mg/L in September 2017 to 0.06 mg/L in August 2021.

Similar decreasing trends are also noted spatially and vertically downgradient of well YGWC-38. Preliminary data collected from YAMW-5 suggest generally stable pH and chloride concentrations and potential decreasing concentrations of boron, sulfate, and TDS in the deeper aquifer zone adjacent to YGWC-38 (**Figure 8**). Statistical analysis of the current selenium data set at YAMW-5 has not yielded an SSL. However, between September 2020 and March 2021, concentrations of selenium have increased from 0.026 mg/L to 0.061 mg/L, respectively, with the most recent (August 2021) measurement of 0.055 mg/L exceeding the GWPS of 0.05 mg/L. As additional data become available, a continued evaluation of constituent concentration trends will be performed.

Similar to observed trends at YGWC-38, concentrations of boron, sulfate and TDS have been decreasing over time at PZ-37 (**Figure 9**); chloride and pH trends are generally stable. Selenium concentrations in PZ-37 varied between 0.168 mg/L in January 2018 and approximately 0.33 mg/L in September 2018 and 2020, before decreasing to 0.20 mg/L in August 2021. To vertically delineate selenium in the vicinity of PZ-37, a deep bedrock well, PZ-52D was installed in September 2021 at a shallower depth than PZ-37D. Concentrations of selenium at PZ-52D are below detection (**Table 1**).

On the west side of the R6 CCR Landfill, boron, sulfate, and TDS concentrations have declined at YGWC-41 (**Figure 10**). For example, boron decreased from a maximum of 15.2 mg/L in February 2018 to 3.3 mg/L in

August 2021. Concentrations of beryllium have decreased over time, from 0.0039 mg/L (February 2018) to 0.0012 mg/L (August 2021). Similarly, selenium concentrations at YGWC-41 have decreased from a maximum of 0.071 mg/L in February 2018 to 0.027 mg/L in August 2021. Selenium concentrations are lower on the west side of the R6 CCR Landfill, as noted in wells YGWC-41 and YGWC-42, compared to YWGC-38 and PZ-37 on the east side of the unit.

Selenium concentrations in well YGWC-42 also decreased from the maximum concentration of 0.059 mg/L (October 2017) and stabilized over time, with the most recent measurement of 0.043 mg/L in August 2021, which is below the GWPS of 0.05 mg/L. Concentrations of boron, sulfate and TDS also decreased over time (**Figure 11**), with concentrations of chloride generally stable. Concentrations of boron have decreased from a maximum of 22.7 mg/L in April 2018 to 13.5 mg/L in August 2021. Concentrations of sulfate have similarly decreased from a maximum of 1,100 mg/L in October 2017 to 500 mg/L in August 2021. Despite the observed decreasing trend of several constituents, concentrations of lithium have increased from 0.033 mg/L in October 2017 to concentrations that exceed the state GWPS of 0.03 mg/L (0.059 mg/L in March 2021 and 0.053 mg/L in August 2021) at statistically significant levels.

In summary, groundwater monitoring data show declining trends in concentrations of CCR constituents, such as boron, sulfate, beryllium, and selenium, most likely due to pond closure activities progressing at Plant Yates since 2014. Concentrations of lithium at YGWC-42 will continue to be monitored and evaluated to support remedy selection. Analytical lab reports are provided in Attachment 4.

3.4 Modeling to Support Remedy Selection

In 2021, the development and calibration of a groundwater flow and a solute transport model commenced, using the United States Geological Survey (USGS) Modular Three-Dimensional Finite-Difference Unstructured Grid Transport (MODFLOW-USGT) simulation code. The model is designed to simulate average flow conditions, groundwater flow paths from various portions of the site, and solute transport at different points in time, from pre-closure to post-closure predictive modeling. The model will be calibrated to historical water quality conditions, and, upon successful calibration, the solute transport model will be used to evaluate remedial options and post-closure water quality conditions to support remedy selection.

3.5 Conceptual Site Model Update

The data and analysis of information collected during the drilling of BH-52 and installation of monitoring wells PZ-52D and PZ-53D provide further refinement of the Conceptual Site Model (CSM). The following bullets summarize the current understanding of the CSM within the context of selecting an appropriate corrective measure for selenium, beryllium, and lithium in groundwater.

- The datasets generated from the recent borehole investigation are consistent with the existing CSM and provide further detail on vertical hydraulic gradients, fracture orientation, and estimated vertical extent of constituent plume migration.
    - Upward groundwater flow, ranging from 0.01 to 0.08 gallons per minute (gpm), in the vicinity of BH-52 was determined with a heat pulse flowmeter and aligns with the flow direction characteristic in the Piedmont Physiographic Province near surface drainage (discharge) features within the basin.

  - Evaluation of the structural features (predominantly foliations with some fractures) in the bedrock at BH-52 determined a similar northeast trending orientation and dip angle (toward the southeast and dipping approximately 25 degrees) as mapped foliation in the bedrock (Golder 2017) and suggest potential for interconnectivity of structural features beneath and adjacent to the R6 CCR Landfill. These findings are consistent with the existing CSM.
- The depth to which selenium impacts are observed (and require corrective measures) is limited to less than 90 feet which is significantly less than previously monitored during the installation of PZ-37D.
- A new SSL for lithium was identified at YGWC-42 on the west side of the R6 CCR Landfill. Supplemental sampling and analysis was completed in both downgradient and delineation wells to further understand the nature and extent of lithium in groundwater. Additional sampling and analysis of lithium at YGWC-42 will support future updates to the CSM.

4 Evaluation of Corrective Measures

Closure activities (completed and ongoing) for the ash ponds and the R6 CCR Landfill support source control measures that will reduce the potential migration of CCR constituents to groundwater. With few exceptions, constituent concentrations have decreased over time as the shallow aquifer responds to the closure activities completed. Georgia Power proactively initiated an adaptive site management approach, as outlined in the ACM Report (ACC 2019), to support the groundwater remedy selection process and address potential changes in site conditions as appropriate during the ash pond closure. The adaptive site management approach will take existing site conditions, including natural attenuation mechanisms, into account and may be adjusted over the life cycle of the Site as new information and technologies become available. At this time, the data collected support the following retained list of potential corrective measures, as summarized in **Table 2**:

Geochemical Manipulation (In Situ Injection) In Situ Injection technology is the application of reagents in the subsurface to influence the solubility, mobility, and/or toxicity of inorganic constituents. The hydrogeology of the site and available in situ options for immobilization of selenium and beryllium supports the implementation of in situ injections. In situ reagents for lithium treatment are not as well established. Based on the evaluation to date, the in situ injection technology is retained for the treatment of selenium and beryllium.

Hydraulic Containment (Pump and Treat) Hydraulic control/containment (P&T) uses groundwater extraction to establish a hydraulic gradient to capture and control the migration of groundwater that is impacted by a constituent of concern. Groundwater extraction and treatment is feasible at the site and hydraulic containment is retained for further consideration.

MNA MNA is defined as the reliance on natural attenuation processes (within the context of a carefully controlled and monitored site cleanup approach) to achieve site-specific remediation objectives within a timeframe that is reasonable compared to that offered by other more active methods (USEPA 2007). MNA is a remedial solution that takes advantage of natural attenuation processes to reduce constituents in soil and groundwater. The evaluation of attenuation will be considered for the SSL of lithium at YGWC-42 as well as the other constituents undergoing ACM at the site. Geochemical characterization, including selenium speciation, solids mineralogical characterization, a bench top sorption study conducted in 2020 (Arcadis 2021), and trend analysis conducted through the Second Half of 2021 continue to support the retention of this technology for consideration in remedy selection.

Phytoremediation Phytoremediation is the direct use of various living plants as a means of hydraulic control or containment, immobilization of constituents, and/or uptake/degradation of constituents found in shallow groundwater or, if engineered, using TreeWells® in intermediate depth groundwater. Phytoremediation would be difficult to implement at the depths of the current SSLs at the R6 Landfill. However, phytoremediation could be implementable downgradient of the R6 Landfill and is retained for further evaluation of beryllium, lithium and selenium if downgradient wells yield SSLs in the future.

5 Planned Activities and Schedule

In support of remedy selection from among the retained corrective measures, the following activities (organized by general site area) are recommended for the remainder of 2021:

- Continue routine groundwater sampling for Appendix III and Appendix IV constituent concentrations at delineation locations to analyze and evaluate trends for effectiveness of source control and plume stability to support the MNA evaluation. Multiple datasets will be needed to assess temporal variations in conditions to confirm current stable and decreasing trends.
- Continue evaluation of groundwater and aquifer solids data using the phased framework for the evaluation of MNA as a viable remedy.
- Perform solute transport model simulations to support and evaluate options for remedy selection.
- Continue evaluation of flow conditions in the area of newly installed PZ-52D and PZ-53D to support the development of conceptual designs for the evaluation of active remedy options, such as pump and treat, as well as the fate and transport for selenium for options such as MNA.

Georgia Power will include future semiannual ACM progress reports in routine groundwater monitoring reports to document groundwater conditions, results associated with additional data gathering, and the progress of selecting and designing the remedy in accordance with 40 CFR § 257.97(a). Record keeping, notifications, and publicly accessible internet site requirements for the semiannual ACM progress reports will be provided in accordance with 40 CFR § 257.105(h)(12), 257.106(h)(9), and 257.107(h)(9), respectively. Preparation of a remedy selection report is anticipated in 2022.

6 References

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Tables

Table 1
2021 Delineation Well Data
2021 Semiannual Remedy Selection and Design Progress Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWC-38	YGWC-38	YGWC-38	YGWC-41	YGWC-41	YGWC-41	YGWC-42	YGWC-42
		2/9/2021	3/4/2021	8/26/2021	2/10/2021	3/4/2021	8/26/2021	2/10/2021	3/4/2021
Appendix III	pH	5.04	5.01	4.54	4.98	4.69	6.77	5.65	5.59
	Boron	--	6.4	6.1	--	4.0	3.3	--	14.8
	Calcium	--	87.0	73.6	--	16.4	12.8	--	90.7
	Chloride	--	3.9	4.1	--	3.4	3.6	--	2.7
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	--	356	328	--	117	117	--	537
	Total Dissolved Solids	--	600	562	--	224	225	--	501
Appendix IV	Antimony	0.00031 J	< 0.00028	< 0.00078	0.0014 J	< 0.00028	< 0.00078	0.00053 J	< 0.00028
	Arsenic	0.00098 J	< 0.00078	0.0013 J	< 0.00078	< 0.00078	< 0.0011	0.0016 J	< 0.00078
	Barium	0.016	0.016	0.016	0.017	0.017	0.018	0.031	0.030
	Beryllium	0.0029 J	0.0029	0.0028	0.0015 J	0.0015	0.0012	0.000057 J	< 0.000046
	Cadmium	0.0014 J	0.0013	0.0011	< 0.00012	< 0.00012	< 0.00011	< 0.00012	< 0.00012
	Chromium	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.00055
	Cobalt	< 0.00038	< 0.00038	< 0.00039	< 0.00038	< 0.00038	< 0.00039	0.0019 J	0.0018 J
	Lead	< 0.000036	< 0.000036	< 0.00089	0.00020 J	< 0.000036	< 0.00089	0.000054 J	< 0.000036
	Lithium	0.0067 J	0.0067 J	0.0070 J	0.0021 J	0.0021 J	0.0021 J	0.058	0.059
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	< 0.00069	< 0.00069	< 0.00074	< 0.00069	< 0.00069	< 0.00074	0.00094 J	0.00085 J
	Combined Radium - 226/228	0.626 U	0.816 U	0.427 U	0.548 U	1.23	0.356 U	0.612 U	1.02
	Selenium	0.073	0.076	0.060	0.033	0.037	0.027	0.043	0.048
	Thallium	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

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

U: the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualifited by the laboratory as estimated.

Table 1
2021 Delineation Well Data
2021 Semiannual Remedy Selection and Design Progress Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YGWC-42	PZ-35	PZ-35	PZ-35	PZ-37	PZ-37	PZ-37	PZ-37D	PZ-37D
		8/25/2021	2/10/2021	3/4/2021	9/1/2021	2/9/2021	3/4/2021	8/25/2021	5/13/2021	9/3/2021
Appendix III	pH	6.73	5.58	5.64	6.82	5.42	5.51	5.48	7.79	7.44
	Boron	13.5	--	0.012 J	0.044	--	12.4	10.3	1.3	1.6
	Calcium	79.9	--	4.4	7.9	--	118	106	68.3	64.0
	Chloride	3.4	--	6.7	6.3	--	3.9	7.0	4.0	7.1
	Fluoride	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	0.12	0.15
	Sulfate	500	--	8.8	38.7	--	485	472	178	153
	Total Dissolved Solids	886	--	59.0	128	--	856	876	381	374
Appendix IV	Antimony	< 0.00078	< 0.00028	0.00039 J	< 0.00078	0.00035 J	< 0.00028	< 0.00078	0.00052 J	< 0.00078
	Arsenic	0.0014 J	0.00096 J	< 0.00078	< 0.0011	0.0015 J	< 0.00078	0.0014 J	< 0.00078	< 0.0011
	Barium	0.027	0.032	0.033	0.067	0.036	0.036	0.035	0.015	0.015
	Beryllium	< 0.000054	0.00025 J	0.00025 J	0.00045 J	0.00029 J	0.00017 J	0.00059	< 0.000046	< 0.000054
	Cadmium	< 0.00011	< 0.00012	< 0.00012	< 0.00011	0.00042 J	0.00028 J	0.00094	< 0.00012	< 0.00011
	Chromium	< 0.0011	0.00060 J	0.00070 J	< 0.0011	< 0.00055	< 0.00055	< 0.0011	< 0.00055	< 0.0011
	Cobalt	0.0014 J	< 0.00038	< 0.00038	< 0.00039	0.0023 J	0.0030 J	0.0068	< 0.00038	< 0.00039
	Lead	< 0.00089	0.000087 J	0.00015 J	< 0.00089	0.000088 J	< 0.000036	< 0.00089	0.000049 J	< 0.00089
	Lithium	0.053	0.0012 J	0.0015 J	0.0019 J	0.024 J	0.028 J	0.023 J	0.011 J	0.013 J
	Mercury	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	0.00078 J	< 0.00069	< 0.00069	< 0.00074	0.0016 J	0.0024 J	0.0011 J	0.0042 J	0.0018 J
	Combined Radium - 226/228	0.978 U	0.546 U	0.397 U	0.696 U	1.52	1.49	1.41	5.36	3.18
	Selenium	0.043	< 0.0016	< 0.0016	0.0016 J	0.28	0.27	0.20	< 0.0016	< 0.0014
	Thallium	--	< 0.00014	--	--	< 0.00014	--	--	< 0.00014	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

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-- Not analyzed for this constituent.

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Table 1
2021 Delineation Well Data
2021 Semiannual Remedy Selection and Design Progress Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	PZ-51	PZ-52D	YAMW-1	YAMW-1	YAMW-1	YAMW-2	YAMW-2	YAMW-2	YAMW-3
		11/17/2021	11/4/2021	2/9/2021	3/3/2021	9/1/2021	2/9/2021	3/3/2021	9/1/2021	11/17/2021
Appendix III	pH	6.15	6.62	6.42	6.51	5.97	5.81	5.67	6.67	6.01
	Boron	--	0.69	--	0.039 J	0.18	--	0.032 J	0.017 J	--
	Calcium	--	25.6	--	6.9	16.8	--	1.5	1.4	--
	Chloride	--	9.5	--	6.1	5.7	--	2.5	2.6	--
	Fluoride	--	0.10	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	--
	Sulfate	--	191	--	16.9	94.7	--	7.9	8.3	--
	Total Dissolved Solids	--	426	--	121	219	--	40.0	60.0	--
Appendix IV	Antimony		<0.00078	0.00037 J	0.025	0.0024 J	< 0.00028	< 0.00028	< 0.00078	--
	Arsenic	--	0.0019J	< 0.00078	< 0.00078	< 0.0011	< 0.00078	< 0.00078	< 0.0011	--
	Barium	--	0.026	0.039	0.035	0.075	0.0085 J	0.0082	0.0072	--
	Beryllium	--	<0.000054	< 0.000046	< 0.000046	0.000095 J	0.000051 J	< 0.000046	0.000065 J	--
	Cadmium	--	<0.00011	0.00013 J	< 0.00012	0.00023 J	< 0.00012	< 0.00012	< 0.00011	--
	Chromium	--	<0.0011	0.0010 J	0.00076 J	< 0.0011	0.0011 J	0.0012 J	0.0030 J	--
	Cobalt	--	0.00082J	0.030	0.018	0.022	0.0010 J	0.00082 J	0.00093 J	--
	Lead	--	0.0010	0.00019 J	< 0.000036	< 0.00089	0.00011 J	0.000080 J	< 0.00089	--
	Lithium	0.0049J	0.016J	0.021 J	0.022 J	0.013 J	< 0.00081	< 0.00081	< 0.00073	0.046
	Mercury	--	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	--
	Molybdenum	--	0.012	0.0038 J	0.0037 J	0.0014 J	< 0.00069	< 0.00069	< 0.00074	--
	Combined Radium - 226/228	--	--	0.866 U	0.377 U	0.676 U	0.492 U	0.563 U	0.761 U	--
	Selenium	--	0.0034J	< 0.0016	< 0.0016	0.0027 J	< 0.0016	< 0.0016	< 0.0014	--
	Thallium	--	--	< 0.00014	--	--	< 0.00014	--	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

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Table 1
2021 Delineation Well Data
2021 Semiannual Remedy Selection and Design Progress Report
Plant Yates - A-3, A, B, B' and R6 CCR Landfill

	Analyte	YAMW-3	YAMW-4	YAMW-4	YAMW-4	YAMW-5	YAMW-5	YAMW-5
		12/9/2021	2/9/2021	3/3/2021	8/25/2021	2/9/2021	3/4/2021	8/26/2021
Appendix III	pH	5.92	6.89	6.81	6.79	5.37	5.32	5.35
	Boron	--	--	0.81	2.8	--	6.1	5.9
	Calcium	--	--	20.6	11.0	--	53.8	45.0
	Chloride	--	--	22.9	1.5	--	3.7	3.9
	Fluoride	--	0.14	0.14	< 0.050	< 0.050	< 0.050	< 0.050
	Sulfate	--	--	91.7	164	--	340	338
	Total Dissolved Solids	--	--	245	332	--	604	570
Appendix IV	Antimony	--	0.0011 J	0.00062 J	< 0.00078	< 0.00028	< 0.00028	< 0.00078
	Arsenic	--	0.0010 J	0.00079 J	< 0.0011	0.00095 J	< 0.00078	< 0.0011
	Barium	--	0.020	0.021	0.0037 J	0.042	0.039	0.036
	Beryllium	--	< 0.000046	< 0.000046	< 0.000054	0.00015 J	0.00013 J	0.00012 J
	Cadmium	--	< 0.00012	< 0.00012	< 0.00011	0.00025 J	0.00018 J	0.00021 J
	Chromium	--	0.00057 J	< 0.00055	< 0.0011	< 0.00055	< 0.00055	< 0.0011
	Cobalt	--	0.00063 J	0.0010 J	0.00041 J	< 0.00038	< 0.00038	< 0.00039
	Lead	--	0.00054 J	0.000096 J	< 0.00089	0.000073 J	0.000041 J	< 0.00089
	Lithium	0.043	0.018 J	0.020 J	0.033	0.016 J	0.016 J	0.015 J
	Mercury	--	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078	< 0.000078
	Molybdenum	--	0.0068 J	0.0049 J	0.0081 J	< 0.00069	< 0.00069	< 0.00074
	Combined Radium - 226/228	--	0.659 U	1.07	0.0991 U	1.07 U	1.46	0.724 U
	Selenium	--	< 0.0016	< 0.0016	0.019	0.060	0.061	0.055
	Thallium	--	< 0.00014	--	--	< 0.00014	--	--

Notes:

Analytical results are reported in milligrams per liter except for combined radium results, which are reported in picoCuries per liter and pH in standard units.

Appendix III = Consituents for Detection Monitoring - 40 CFR Part 257 Appendix III.

Appendix IV = Consituents for Assessment Monitoring - 40 CFR Part 257 Appendix IV.

-- Not analyzed for this constituent.

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

Laboratory Qualifiers:

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

U: the substance was detected below the Minimum Detection Concentration (MDC) and the precision of the laboratory instruments could not produce a reliable value. Therefore, the value followed by U is qualifited by the laboratory as estimated.

Table 2.
Remedy Evaluation Summary
2021 Semiannual Remedy Selection and Design Progress Report
Plant Yates AP-3, A, B, B', and R6 CCR Landfill
Georgia Power Company

Corrective Measure *Retained/Screened Out*	**Geochemical Manipulation (In Situ Injection)** *Retained*	**Hydraulic Containment** *Retained*	**In-Situ Stabilization/Solidification (ISS)** *Screened Out*	**Monitored Natural Attenuation** *Retained*	**Subsurface Vertical Barrier Walls** *Screened Out*	**Permeable Reactive Barrier** *Screened Out*	**Phytoremediation** *Retained if needed for future compliance well SSLs downgradient of AP-A/B/B'/3 or R6 CCR Landfill*
Description	Injection of a chemical or organic substrate to alter geochemical conditions to those more favorable for stabilization of beryllium, selenium, and/or lithium.	Combines a groundwater extraction system with a surface treatment system to remove target analytes from the subsurface and/or to control/prevent constituent migration.	In-situ solidification is the process by which constituent mobility in a solid matrix is decreased through physical and/or chemical means. Grout or other chemical additives are mixed with aquifer materials to reduce permeability. ISS could be applied to the aquifer matrix in groundwater flow zones but is less applicable than other technologies evaluated.	A remedial solution that takes advantage of natural attenuation processes to attenuate constituents in soil and groundwater. This option can meet the GWPS given sufficient time and favorable conditions.	Used to physically control the migration of impacted groundwater flow through isolation or redirection, typically around or upgradient of a source area.	A permeable reactive barrier is a zone of reactive material that extends below the water table to intercept and treat groundwater.	Phytoremediation is the direct use of various living plants as a means of hydraulic control or containment, immobilization of constituents, and/or uptake/degradation of constituents in shallow groundwater or, if engineered, using TreeWells® for intermediate depth groundwater. This technology can meet the GWPS for low level metal concentrations present in shallow groundwater.
40 CFR 257.96(c)(1)							
Ease of Implementation	This process is not substantially limited by implementation. The hydrogeology of the site is amenable to reagent injection and distribution. Bench testing and pilot testing can be used to optimize implementation.	Relative ease in implementation compared to other technologies.	ISS technology would be difficult to impractical to implement at the scale of the AMA and R6 landfill. The implementation would also be complicated on the R6 landfill where the cap is in place.	This process is not limited by implementation. Robust performance monitoring program required.	Installing into competent bedrock may be challenging due to depth, the presence of fractures, and the groundwater flow directions at the site.	Installing into competent bedrock may be challenging due to depth and presence of fractures. Implementation is also challenging due to the groundwater flow directions at the site.	The depth of the treatment zone is limited to depth of root zone when relying on plants alone. When using TreeWell® system, deeper target depths (i.e., 30 feet or more) are achievable. Site ground water elevations are typically 10 feet to 30 feet below ground surface.
Performance	The geochemical manipulation processes identified have the potential to alter conditions and immobilize beryllium and selenium rapidly, but require ongoing monitoring to ensure that conditions remain favorable. Reagents for lithium are not as well established.	Hydraulic containment is an effective corrective measure for remediating dissolved constituents provided regular maintenance is performed throughout the operational life. Not typically immediately effective for trace level metals. Rebounding can occur as water levels return to normal once the pumping system is turned off post-remediation. Generally, requires disposal of treated water and sludges.	Performance would need to be assessed through bench or pilot testing. Likely would need to be used in conjunction with an additional technology for groundwater. Technology anticipated to be less effective for groundwater than other options evaluated.	This process provides ongoing effectiveness and is well documented as an effective measure for remediating groundwater. Lithium is attenuated primarily via physical dilution, dispersion, and sorption during groundwater migration.	Performance may be limited due to site geology.	The effectiveness of this technology may be limited by underflow and reactive lifespan and is only effective for specific constituents. Marginally effective over long periods of time without replacement of PRB material.	May be directly effective by accumulation or uptake of some metals or hydraulic control; however, phytoaccumulation is directly related to the plant species. Constituents may need to be addressed by a method that does not involve direct uptake of impacted groundwater (i.e., traditional phytoremediation). An alternative method, such as a TreeWell® system, may need to be considered.
Potential Impacts	Low potential for impacts: health and safety concerns during injections associated with equipment, injection pressure management and reagent handling, minimal risk of cross media contamination, exposure potential limited to groundwater sampling.	Low potential for impacts: health and safety concerns during construction and O&M, injection pressure management and reagent handling, minimal risk of cross media contamination, exposure potential limited to groundwater sampling.	Low potential for impacts: No health and safety concerns during construction, minimal risk of cross media contamination, exposure potential limited to groundwater sampling.	Low potential for impacts: No health and safety concerns during construction, minimal risk of cross media contamination, exposure potential limited to groundwater sampling.	Low potential for impacts: health and safety during construction, minimal risk of cross media contamination, exposure post-construction limited to groundwater sampling.	Low potential for impacts: health and safety during construction, minimal risk of cross media contamination, exposure post-construction limited to groundwater sampling.	Low potential for impacts: health and safety during construction, minimal risk of cross media contamination, exposure post-construction limited to groundwater sampling.

Table 2.
Remedy Evaluation Summary
2021 Semiannual Remedy Selection and Design Progress Report
Plant Yates AP-3, A, B, B', and R6 CCR Landfill
Georgia Power Company

Corrective Measure *Retained/Screened Out*	**Geochemical Manipulation (In Situ Injection)** *Retained*	**Hydraulic Containment** *Retained*	**In-Situ Stabilization/Solidification (ISS)** *Screened Out*	**Monitored Natural Attenuation** *Retained*	**Subsurface Vertical Barrier Walls** *Screened Out*	**Permeable Reactive Barrier** *Screened Out*	**Phytoremediation** *Retained if needed for future compliance well SSLs downgradient of AP-A/B/B'/3 or R6 CCR Landfill*
Reliability	This process will likely have overall reliability in achieving GWPS goals when adequate volume and subsurface distribution are achieved, although reagents for in situ lithium treatment are not as well established. Ongoing monitoring is necessary to ensure that favorable conditions are maintained once achieved.	This technology provides moderate to high reliability based on extraction well up-time and maintenance for the treatment system.	Reliable immobilization over time with proper implementation.	This process will likely have overall reliability in achieving GWPS goals where impacted area remains internal to the site and is adequately monitored.	The reliability of this technology is limited at depth and by the ability to manage changes in the flow direction and hydraulic head of groundwater.	This technology may not provide reliability in the site-specific lithology due to difficulty in interception groundwater flow though fractured bedrock.	The presence of impacted groundwater below typical root zones would need to be addressed for phytoremediation to be a reliable technology for hydraulic control. Reliable plant species for selenium uptake are more established than for beryllium or lithium.
40 CFR 257.96(c)(2)							
Begin/Complete	Can begin immediately upon completion of pilot testing and/or bench-scale testing, which may take up to 24 months. Long-term monitoring and reporting likely required.	Time needed to model and design may take up to 24 months; variable time for construction depending on scale, generally can be accomplished in 6 months.	Time needed to model and design may take up to 24 months; variable time for construction depending on scale, generally can be accomplished relatively quickly between 6 and 12 months.	Can begin immediately. Long-term monitoring and reporting likely required.	Time needed to model and design may take up to 24 months. Variable time for construction depending on scale, generally can be accomplished relatively quickly between 6 and 12 months.	Time needed to model and design may take up to 24 months; variable time for construction depending on scale, generally can be accomplished in 6 to 12 months.	Time needed to model and design may take up to 6 months. Pilot testing may be required, which could take up to 3 years. Depending on the number of required units, the installation effort is expected to last several weeks. Full hydraulic capture/control is expected approximately 3 years after planting.
40 CFR 257.96(c)(3)							
Institutional Requirements	Deed restrictions may be necessary until in-situ treatment has achieved GWPS. A new UIC permit (for in-situ injections) would be required to implement this corrective measure. No other institutional requirements are expected at this time.	Depending on the effluent management strategy, modifications to the existing NPDES permit may be required, or obtaining a new underground injection control (UIC) permit may be needed if groundwater reinjection is chosen. In addition, deed restrictions may be required if groundwater conditions are above regulatory standards for unrestricted use.	Deed restrictions may be necessary for groundwater areas downgradient of the stabilized and/or solidified areas. No other institutional requirements are expected at this time.	MNA may require the implementation of institutional controls, such as deed restrictions, to preclude potential exposure to groundwater within the footprint of impacted groundwater until GWPS are achieved.	Deed restrictions may be necessary for groundwater areas downgradient of the barrier wall until remedial goals are met. No other institutional requirements are expected at this time.	Deed restrictions may be necessary for groundwater areas upgradient of the PRB (if not installed along the waste boundary). No other institutional requirements are expected at this time.	Deed restrictions may be necessary for groundwater areas upgradient of the phytoremediation area or TreeWell® system. No other institutional requirements are expected at this time.

Table 2.
Remedy Evaluation Summary
2021 Semiannual Remedy Selection and Design Progress Report
Plant Yates AP-3, A, B, B', and R6 CCR Landfill
Georgia Power Company

Corrective Measure *Retained/Screened Out*	**Geochemical Manipulation (In Situ Injection)** *Retained*	**Hydraulic Containment** *Retained*	**In-Situ Stabilization/Solidification (ISS)** *Screened Out*	**Monitored Natural Attenuation** *Retained*	**Subsurface Vertical Barrier Walls** *Screened Out*	**Permeable Reactive Barrier** *Screened Out*	**Phytoremediation** *Retained if needed for future compliance well SSLs downgradient of AP-A/B/B'/3 or R6 CCR Landfill*
Other Env or Public Health Requirements	None expected at this point. Based on downgradient sampling results near adjacent waterbodies, there currently appear to be no potential receptors downgradient of the units.	Based on downgradient sampling results near adjacent waterbodies, there currently are no complete receptor pathways downgradient of the units. Aboveground treatment components may need to be present for an extended period, generating residuals requiring management and disposal.	None expected at this point. Based on downgradient sampling results near adjacent waterbodies, there currently appear to be no potential receptors downgradient of the unit. Following implementation of ISS, this source control remedy is passive, does not create carbon emissions, and preserves groundwater resources.	Little to no physical disruption to remediation areas and no adverse construction-related impacts are expected on the surrounding community. Based on downgradient sampling results near adjacent waterbodies, there currently are no complete receptor pathways downgradient of the units.	Based on downgradient sampling results near adjacent waterbodies, there currently appear to be no potential receptors downgradient of the unit. Due to the potential need for groundwater extraction associated with barrier walls, aboveground treatment components may need to be present for an extended period, creating carbon emissions and generating residuals requiring management and disposal.	None expected at this point. Based on downgradient sampling results near adjacent waterbodies, there currently are no complete receptor pathways downgradient of the unit. Following installation, the remedy is passive.	None expected at this point. Based on downgradient sampling results near adjacent waterbodies, there currently are no complete receptor pathways downgradient of the units. Innovative and green technology may be positively received by various stakeholders. Following installation, the remedy is passive and does not require external energy.
Relative Costs and Screening							
Relative Costs	Moderate costs are associated with this technology.	High costs are associated with this technology (O&M and groundwater disposal).	High costs are associated with this technology.	Relatively lower capital costs are associated with this technology.	High capital costs are associated with this technology.	High capital costs are associated with this technology.	Relatively lower costs are associated with this technology. May require periodic harvesting and disposal of plant species.
Retaining Technology for Further Evaluation?	Yes	Yes	No. ISS technology would be difficult to impractical to implement at the scale of the AMA and R6 landfill. .	Yes	No. Site-specific hydrogeology limits implementability, performance, and effectiveness.	No. Site-specific hydrogeology limits implementability, performance, and effectiveness.	Yes

Notes:
AMA = Ash Management Area
CCR = Coal Combustion Rule
CFR = Code of Federal Regulations
GWPS = Groundwater Protection Standard
MNA = monitored natural attenuation
NPDES = National Pollutant Discharge Elimination System
O&M = operation and maintenance
PRB = permeable reactive barrier
SSL = statistically significant level
UIC = underground injection control

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
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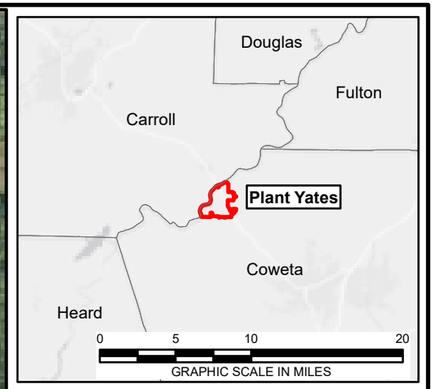
33°26'50"N
33°26'40"N



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- PERMITTED UNIT BOUNDARY

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

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

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

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

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

PZ-06D
YGWA-6S
YGWA-6I
PZ-48
YGWC-49
FORMER ASH POND A
ASH POND 2
PZ-24IA
YGWC-24SA
YAMW-1
PZ-35
YGWC-36A
ASH POND B
ASH POND B'
YGWA-17S
PZ-51
YGWC-43
R6 ASH DISPOSAL AREA
YGWA-18S
YGWA-18I
YAMW-2
YAMW-3
YGWC-42
ASH POND 3
PZ-37
PZ-37D
YAMW-4
YGWC-41
PZ-52D
PZ-53D
YGWC-23S
YAMW-5
YGWC-38
ASH MANAGEMENT AREA
YGWA-40
YGWA-39
YGWA-21I
YGWA-20S
YGWA-4I
PZ-04S
PZ-05S
YGWA-5D
YGWA-5I

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

NOTE:

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

0 350 700 1,400
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA

SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

WELL LOCATION MAP

ARCADIS

FIGURE
2

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

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

740 750 760 770 730 720 710 720 730 740 750 760 770 780 790 800 800 790 780

YGWA-6I YGWA-6S
PZ-06D
PZ-48
YGWC-49 < 0.0014
FORMER ASH POND A
PZ-24IA YGWC-24SA < 0.0014
YAMW-1 0.0027 J
PZ-35 0.0016 J
YGWC-36A < 0.0014
ASH POND B
ASH POND B'
PZ-51 YGWC-43 < 0.0016
R6 ASH DISPOSAL AREA
YGWA-17S < 0.0014
YGWA-18S < 0.0014
YGWA-18I < 0.0014
YAMW-3
YAMW-2 < 0.0014
YGWC-42 0.043
YAMW-4 < 0.0014
YGWC-41 0.027
PZ-37D < 0.0014
PZ-37 0.20
PZ-52D 0.0034 J
PZ-53D
YGWC-23S 0.032
YAMW-5 0.055
YGWC-38 0.060
0.05
INSET AREA
ASH POND 3
ASH MANAGEMENT AREA
YGWA-40 < 0.0014
YGWA-39 < 0.0014
YGWA-21I < 0.0014
YGWA-20S < 0.0014
PZ-04S YGWA-4I < 0.0014
PZ-05S
YGWA-5I < 0.0014
YGWA-5D < 0.0014

INSET AREA

PZ-37D < 0.0014
PZ-52D 0.0034 J
PZ-53D
PZ-37 0.20
YGWC-23S 0.032
YAMW-5 0.055
YGWC-38 0.060
0.05

0 50 100 200
GRAPHIC SCALE IN FEET

LEGEND

- MONITORING WELL LOCATION
- NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION
- SELENIUM ISOCONTOUR LINE (DASHED WHERE INFERRED)

SELENIUM GROUNDWATER PROTECTION STANDARD VALUE = 0.050 mg/L

0.046 SELENIUM CONCENTRATION VALUES (mg/L)

NOTES:
1. RESULTS ARE PROVIDED IN MILLIGRAMS PER LITER (mg/L)
2. J = ESTIMATED VALUE
3. SAMPLES WERE COLLECTED ON AUGUST 25-27 & SEPTEMBER 1-3 & 27, 2021.
4. APPROXIMATE POTENTIOMETRIC CONTOURS DATED AUGUST 16 & 17, 2021.
5. AERIAL IMAGE SOURCES: JULY 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 350 700 1,400
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

SELENIUM ISOCONCENTRATION MAP, AUGUST AND SEPTEMBER 2021

ARCADIS

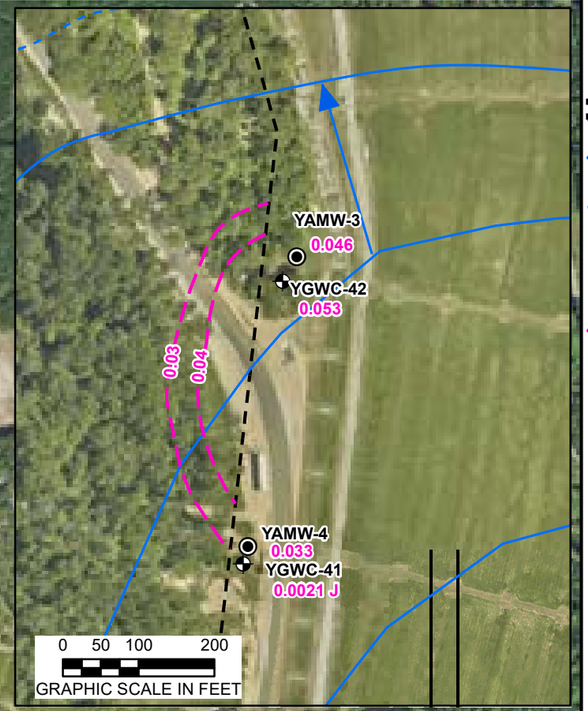
FIGURE
3A

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

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

740 750 760 770 730 720 710 720 730 740 750 760 780 790 800 780 790 800

YGWA-6I YGWA-6S
PZ-06D
PZ-48
YGWC-49 0.0036 J
FORMER ASH POND A
PZ-24IA YGWC-24SA < 0.00073
YAMW-1 0.013 J
PZ-35 0.0019 J
YGWC-36A 0.00086 J
ASH POND B
ASH POND B'
YGWA-17S < 0.00073
YGWA-18S 0.0019 J
YGWA-18I 0.0032 J
PZ-51 0.0049 J
YGWC-43 0.0092 J
R6 ASH DISPOSAL AREA
YAMW-3 0.046
YAMW-2 < 0.00073
YGWC-42 0.053
YAMW-4 0.033
YGWC-41 0.0021 J
0.03
0.04
PZ-37D 0.013 J
PZ-52D 0.016J
PZ-37 0.023 J
YGWC-23S 0.0026 J
PZ-53D
YAMW-5 0.015 J
YGWC-38 0.0070 J
ASH MANAGEMENT AREA
YGWA-40 < 0.00073
YGWA-39 0.0082 J
YGWA-21I 0.0057 J
YGWA-20S < 0.00073
PZ-04S
YGWA-4I 0.0094 J
PZ-05S
YGWA-5I 0.0032 J
YGWA-5D 0.0075 J



LEGEND

- MONITORING WELL LOCATION
- NON-NETWORK WELL/PIEZOMETER
- PERMITTED UNIT BOUNDARY
- APPROXIMATE POTENTIOMETRIC CONTOUR (FEET) DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

LITHIUM STATE GROUNDWATER PROTECTION STANDARD (GWPS) VALUE = 0.03 mg/L
LITHIUM FEDERAL GROUNDWATER PROTECTION STANDARD (GWPS) VALUE = 0.04 mg/L

- LITHIUM ISOCONTOUR LINE (DASHED WHERE INFERRED)
- 0.033 LITHIUM CONCENTRATION VALUES (mg/L)

NOTES:
1. RESULTS ARE PROVIDED IN MILLIGRAMS PER LITER (mg/L)
2. J = ESTIMATED VALUE
3. SAMPLES WERE COLLECTED ON AUGUST 25-27 & SEPTEMBER 1-3 & 27, 2021.
4. APPROXIMATE POTENTIOMETRIC CONTOURS DATED AUGUST 16 & 17, 2021.
5. AERIAL IMAGE SOURCES: JULY 1, 2021 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 350 700 1,400
GRAPHIC SCALE IN FEET

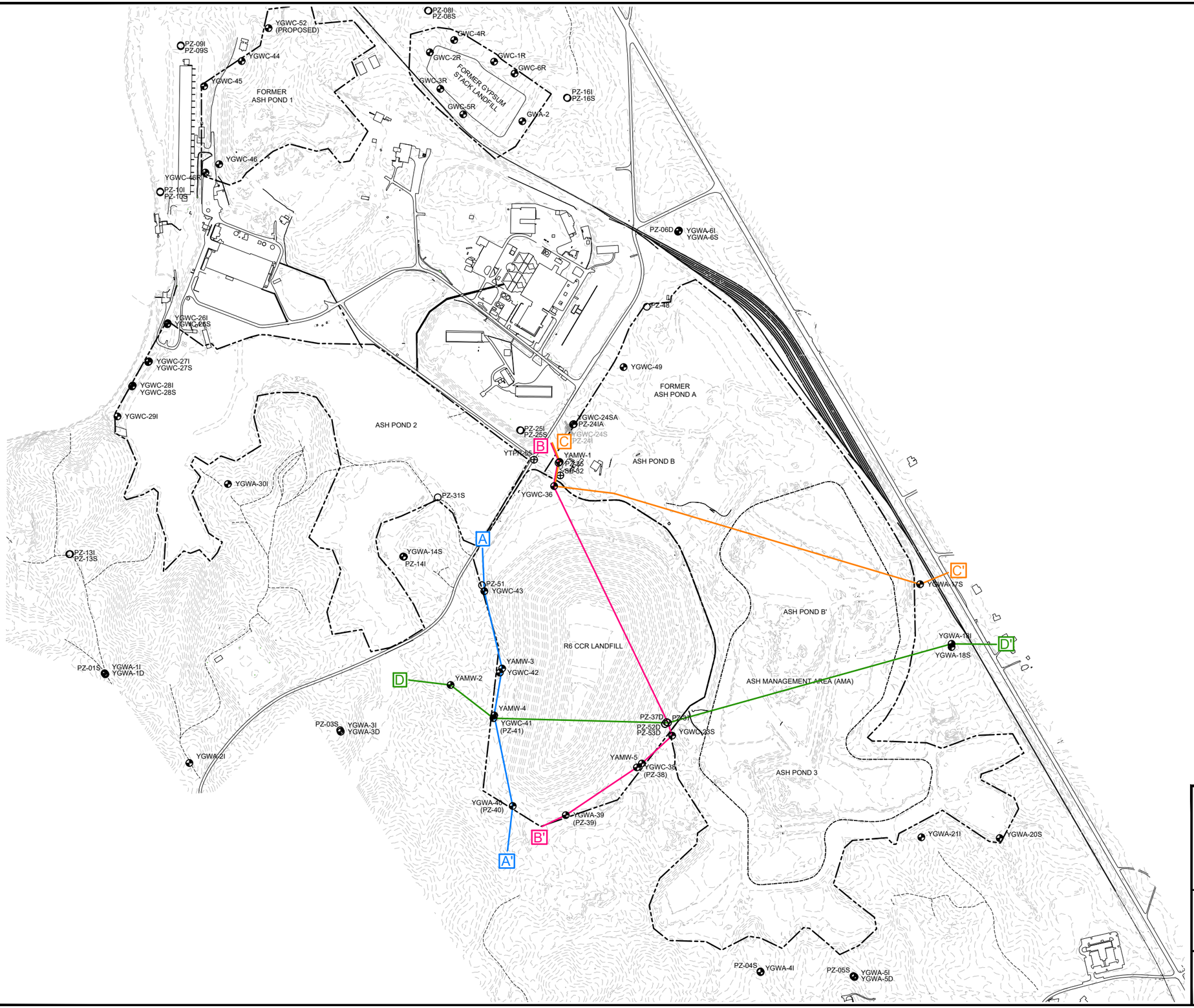
COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power
PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

LITHIUM ISOCONCENTRATION MAP, AUGUST AND SEPTEMBER 2021

ARCADIS

FIGURE
3B



LEGEND:

- EXISTING GRADE
- GROUNDWATER MONITORING WELL
- PEIZOMETER
- TEST BORING
- ABANDONED WELL
- A — CROSS–SECTION
- BOUNDARY PER D&O PLAN
- EXTENT OF ASH MANAGEMENT AREA FINAL COVER

0 800’ 1,600’

GRAPHIC SCALE

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA

2021 SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

CROSS-SECTION LOCATION MAP

ARCADIS

FIGURE **4**

C:\Users\lamiceli\OneDrive - ARCADIS\BIM360 - OneDrive Sync Location\AUS-GEORGIA POWER-PLANT YATES-NEWNAN Georgia\2021\01-In Progress\01-DWG\GP_Fig 4_Cross-Section Location Map.dwg LAYOUT: 4 SAVED: 11/19/2021 1:41 PM ACADVER: 23.1S (LMS TECH) PAGESETUP: ----
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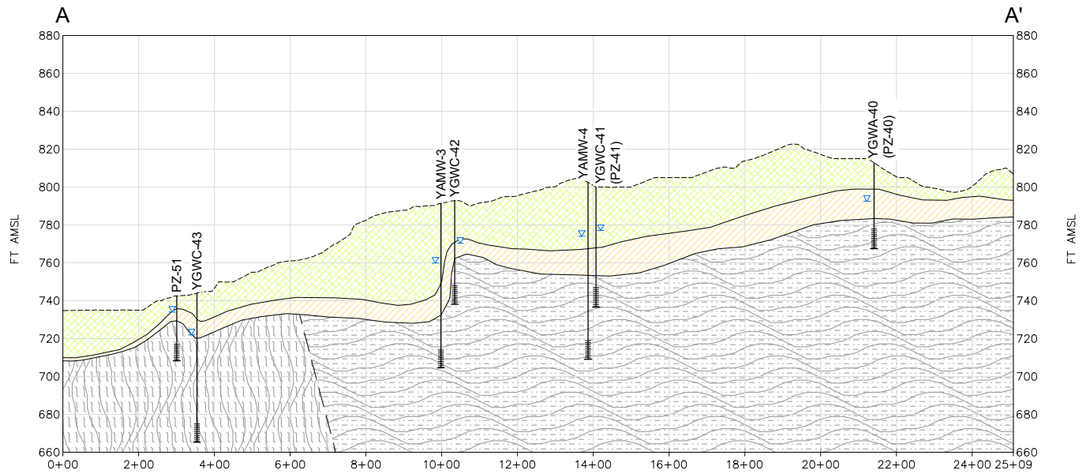
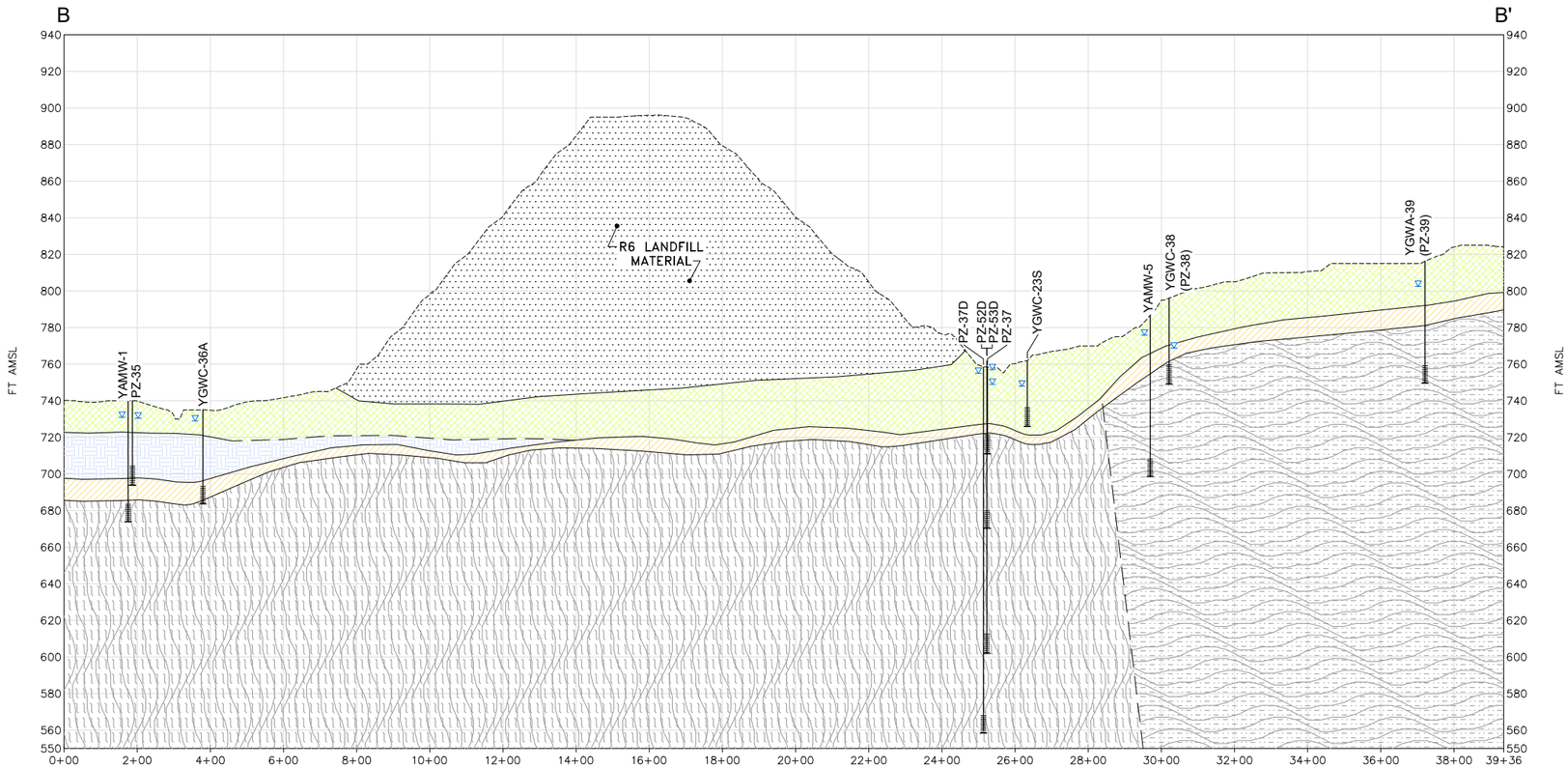
XREFS: IMAGES:
X-GP_2021 Rpt-Base.dwg





LEGEND:

- WATER ELEVATION (AUGUST & NOVEMBER 2021)
- WELL SCREEN

SAPROLITE:

- SILTY SAND – LIGHT BROWN TO TAN FINE–MEDIUM GRAINED SAND WITH SILT. LOOSE
- CLAYEY SAND – MOTTLED TO BROWN, FINE TO MEDIUM GRAINED SAND WITH CLAY. LOOSE.

TRANSITION ZONE:

- HIGHLY WEATHERED AND HIGHLY FRACTURED BIOTITE GNEISS, GRANITIC GNEISS, AND MICA SCHIST. FINE TO COARSE SAND AND GRAVEL PRESENT

BEDROCK:

- BEDROCK (UNDIFFERENTIATED) – UNDIFFERENTIATED BIOTITE GNEISS, GRANITIC GNEISS, AND MICA SCHIST. MODERATELY TO INTENSELY FOLIATED
- BIOTITE GNEISS – BIOTITE AND MUSCOVITE GNEISS. MODERATELY TO INTENSELY FOLIATED

NOTES:

1. CROSS SECTION ELEVATIONS ARE MEASURED IN FEET ABOVE MEAN SEA LEVEL (AMSL).

0 400' 800'
HORIZONTAL GRAPHIC SCALE

0 80' 160'
VERTICAL GRAPHIC SCALE

Georgia Power

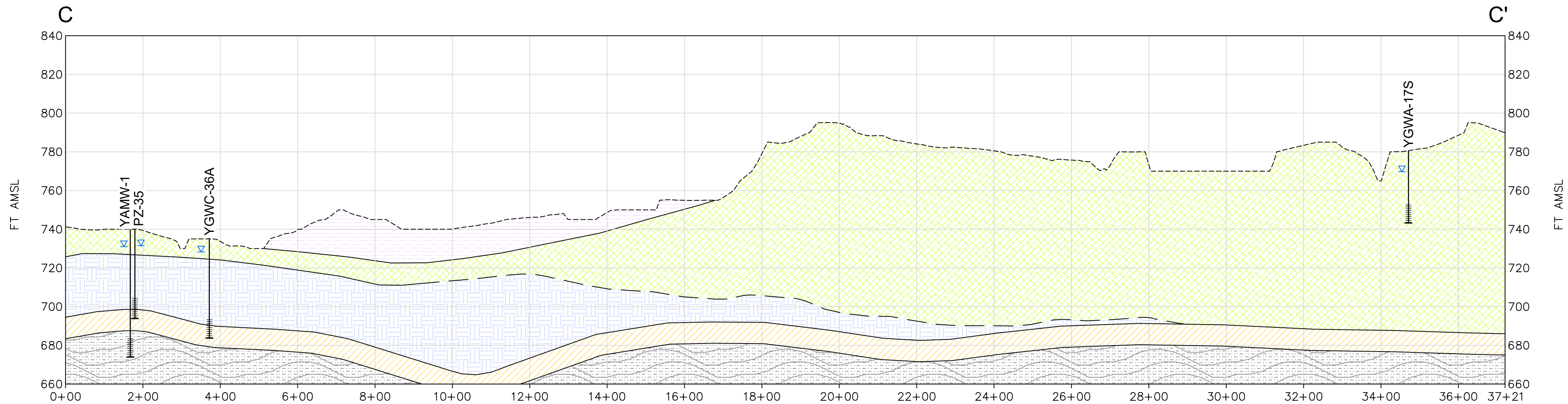
PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA

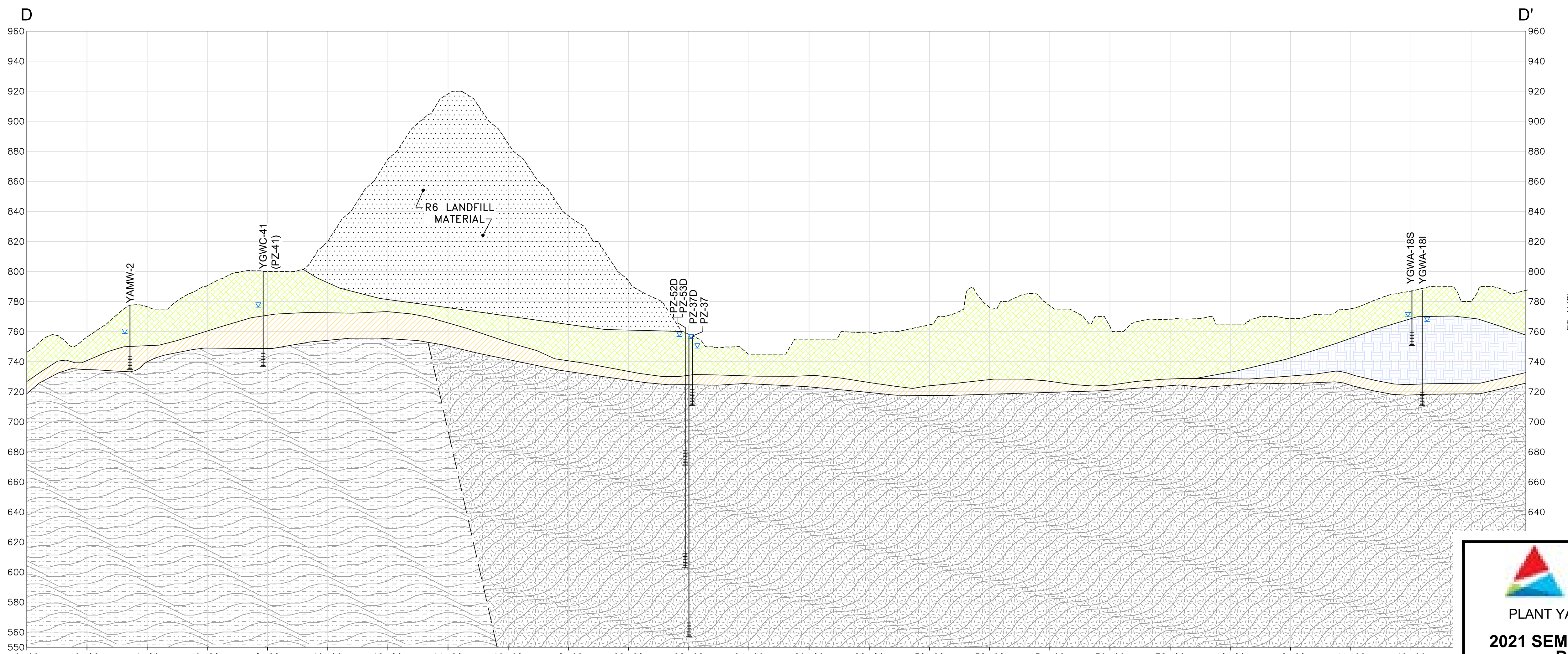
2021 SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

CROSS-SECTIONS A-A' AND B-B'

ARCADIS

FIGURE 5





LEGEND:

- WATER ELEVATION (AUGUST & NOVEMBER 2021)
- WELL SCREEN

SAPROLITE:

- SANDY SILT– LIGHT BROWN TO BROWN SANDY SILT. LOW PLASTICITY
- SILTY SAND – LIGHT BROWN TO TAN FINE–MEDIUM GRAINED SAND WITH SILT. LOOSE
- CLAYEY SAND – MOTTLED TO BROWN, FINE TO MEDIUM GRAINED SAND WITH CLAY. LOOSE.

TRANSITION ZONE:

- HIGHLY WEATHERED AND HIGHLY FRACTURED BIOTITE GNEISS, GRANITIC GNEISS, AND MICA SCHIST. FINE TO COARSE SAND AND GRAVEL PRESENT

BEDROCK:

- GRANITIC GNEISS –GRAY TO WHITE, BIOTITE, MUSCOVITE, QUARTZ, PLAGIOCLASE GNEISS. MODERATELY TO INTENSELY FOLIATED
- BIOTITE GNEISS – BIOTITE AND MUSCOVITE GNEISS. MODERATELY TO INTENSELY FOLIATED

NOTES:

1. CROSS SECTION ELEVATIONS ARE MEASURED IN FEET ABOVE MEAN SEA LEVEL (AMSL).

0 400' 800'
HORIZONTAL GRAPHIC SCALE

0 80' 160'
VERTICAL GRAPHIC SCALE

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA

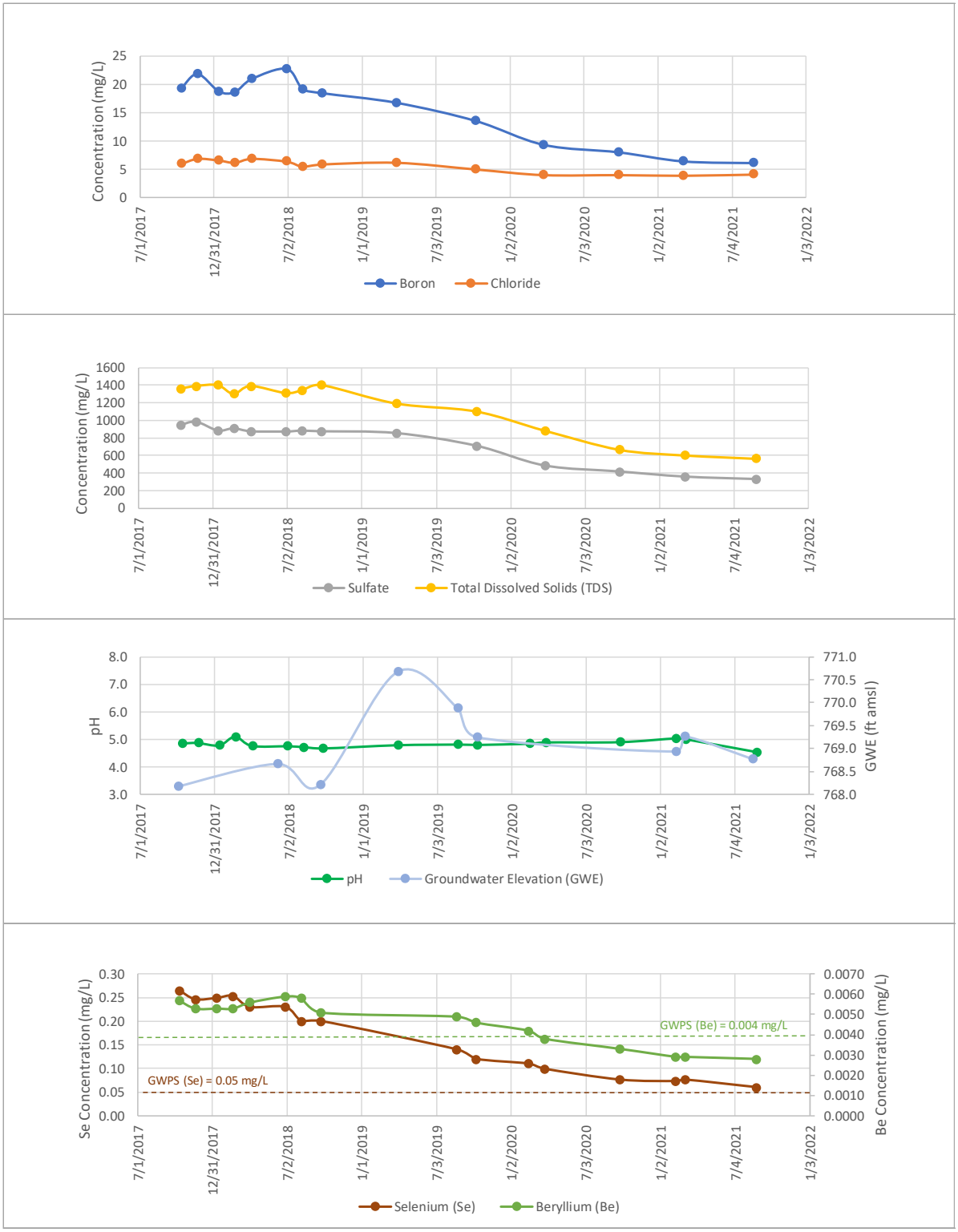
2021 SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

CROSS-SECTIONS C-C' AND D-D'

ARCADIS

FIGURE
6

YGWC-38



Notes:
mg/L – milligrams per liter
ft amsl – feet above mean sea level
GWPS – groundwater protection standard

Georgia Power

PLANT YATES AP-3, A, B, B' AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

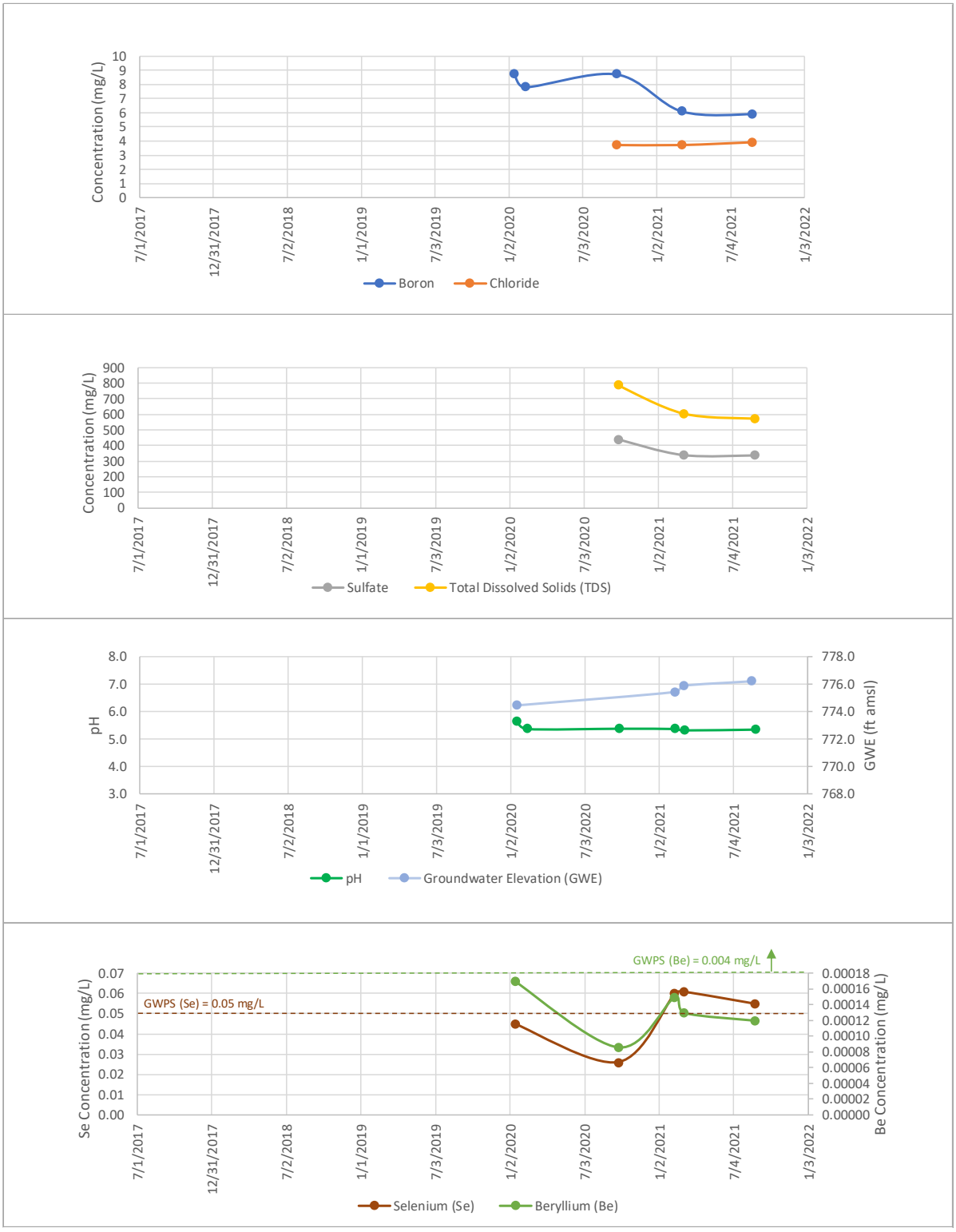
YGWC-38 CONCENTRATION TRENDS

ARCADIS

FIGURE
7

1/4/2022 4:03:40 PM

YAMW-5



Notes:
mg/L – milligrams per liter
ft amsl – feet above mean sea level
GWPS – groundwater protection standard

Georgia Power

PLANT YATES AP-3, A, B, B' AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

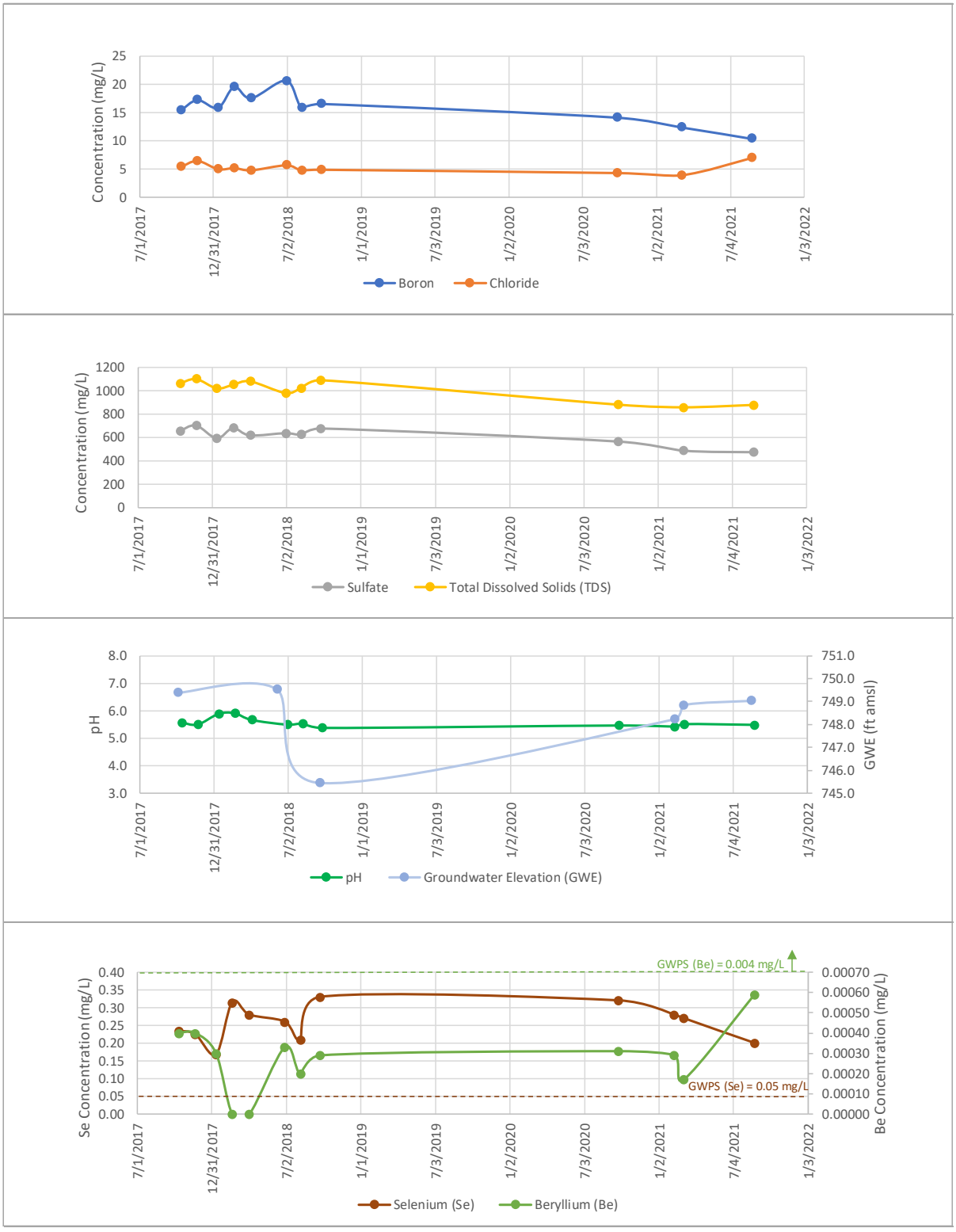
YAMW-5 CONCENTRATION TRENDS

ARCADIS

FIGURE
8

1/4/2022 4:03:40 PM

PZ-37



Notes:
mg/L – milligrams per liter
ft amsl – feet above mean sea level
GWPS – groundwater protection standard

Georgia Power

PLANT YATES AP-3, A, B, B' AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

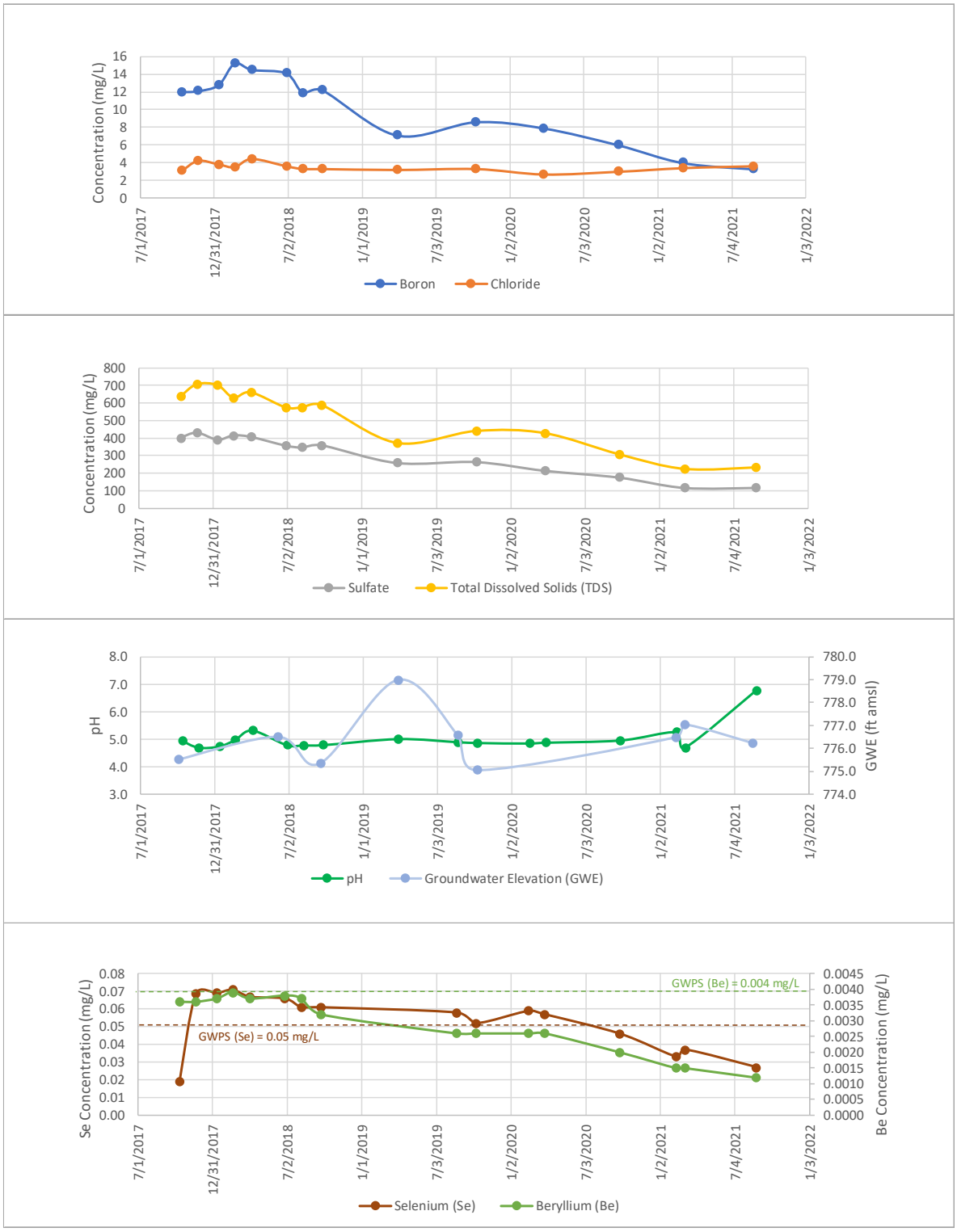
PZ-37 CONCENTRATION TRENDS

ARCADIS

FIGURE
9

1/4/2022 4:03:41 PM

YGWC-41



Notes:
mg/L – milligrams per liter
ft amsl – feet above mean sea level
GWPS – groundwater protection standard

Georgia Power

PLANT YATES AP-3, A, B, B' AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

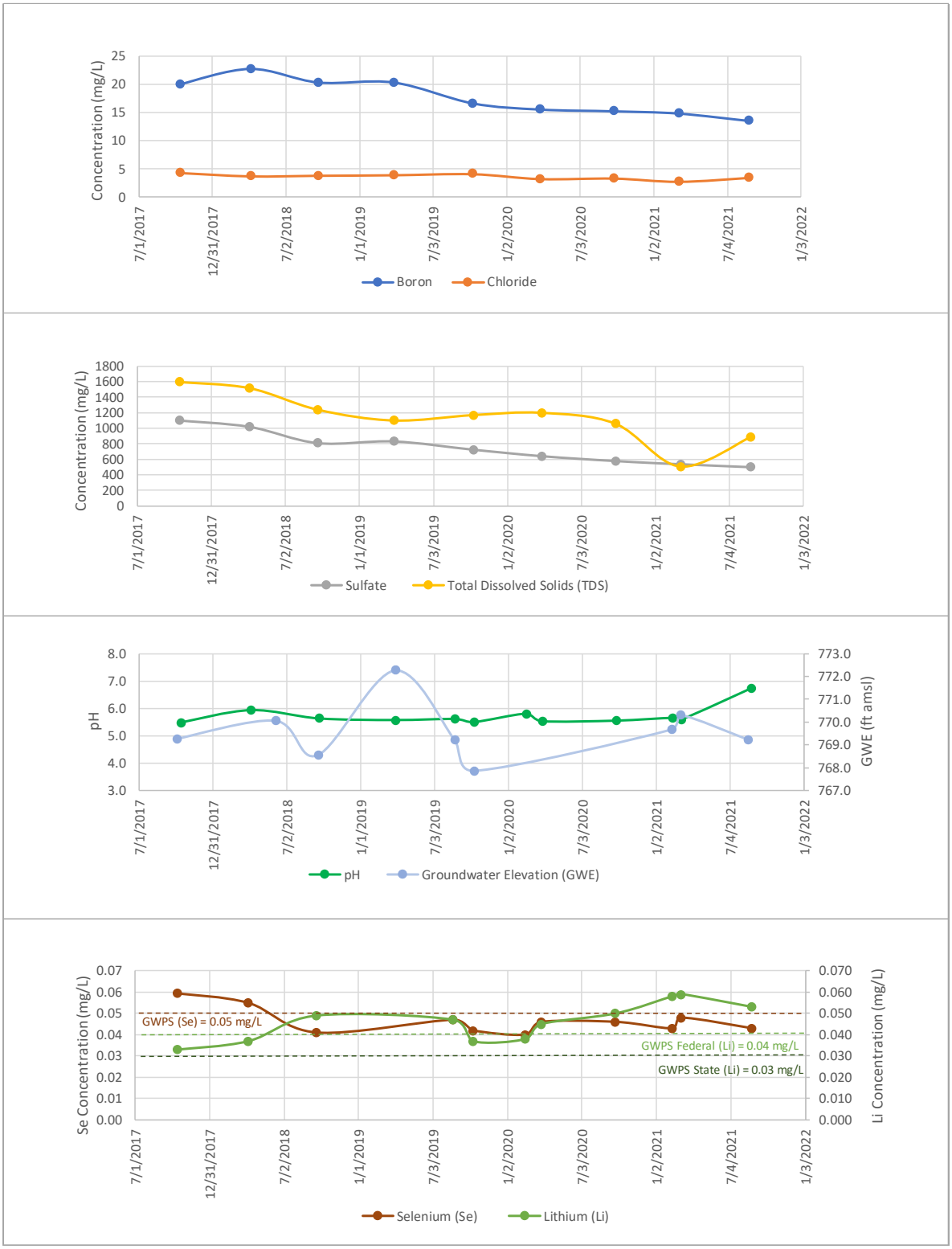
YGWC-41 CONCENTRATION TRENDS

ARCADIS

FIGURE
10

1/4/2022 4:03:41 PM

YGWC-42



Notes:
mg/L – milligrams per liter
ft amsl – feet above mean sea level
GWPS – groundwater protection standard

Georgia Power

PLANT YATES AP-3, A, B, B' AND R6 CCR LANDFILL
NEWNAN, GA
SEMIANNUAL REMEDY SELECTION AND DESIGN PROGRESS REPORT

YGWC-42 CONCENTRATION TRENDS

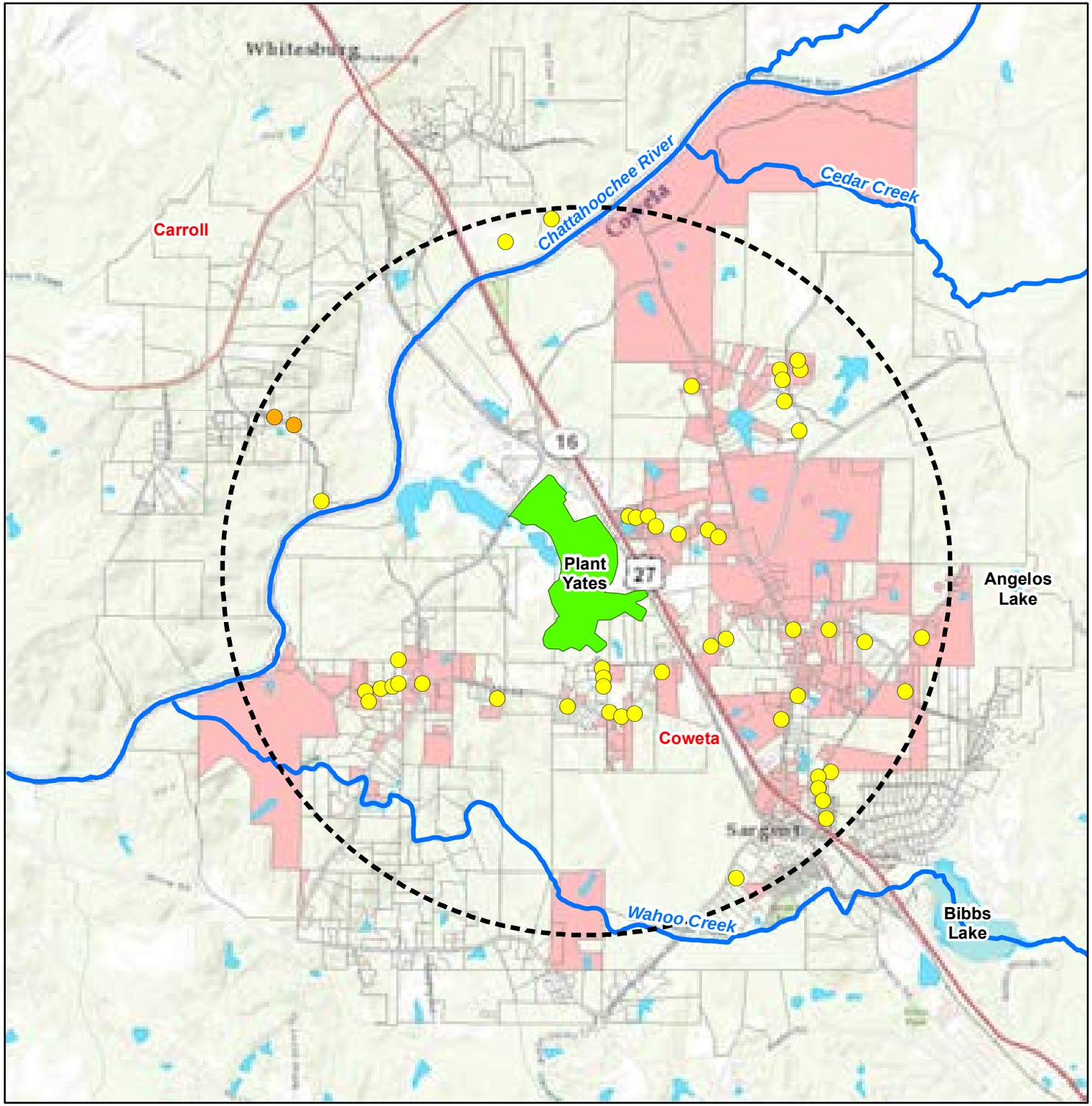
ARCADIS

FIGURE
11

1/4/2022 4:03:42 PM

Attachment 1

EDR GeoCheck® Water Well Survey Report



LEGEND

- Irrigation/Inactive Drinking Water Well
- Private Drinking Water Well
- 2-Mile Radius
- Plant Yates
- Major Waterways
- Lakes and Ponds
- Parcels Identified as Likely Having a Well
- Parcels

NOTE:
1) WELLS IDENTIFIED BY PARCEL LOCATION BUT THAT DO NOT HAVE AN EXACT LOCATION AVAILABLE ARE PRESENTED AS INSIDE THE 2-MILE RADIUS IF THE PARCEL STRADDLES THE INVESTIGATION BOUNDARY.

N
W E
S

0 2,000 4,000 8,000

GRAPHIC SCALE IN FEET

Georgia Power

PLANT YATES AP-2
NEWNAN, GA

WELL SURVEY

ARCADIS

FIGURE
1

PATH: T:_ENV\GA_Power\GPC_Plant_Yates\MXD\2022\Newfields_Well_Survey\Fig_1_Drinking_Well_Survey.mxd DATE SAVED: 1/10/2022 12:17:39 PM LAST SAVED BY: kkelley

GPC Yates
GPC Yates
Newnan, GA 30263

Inquiry Number: 6772072.1s
December 02, 2021

The EDR GeoCheck® Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION **PAGE**

GEOCHECK ADDENDUM

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

GEOCHECK® - PHYSICAL SETTING SOURCE REPORT

TARGET PROPERTY ADDRESS

GPC YATES
GPC YATES
NEWNAN, GA 30263

TARGET PROPERTY COORDINATES

Latitude (North):	33.461389 - 33ˆ 27’ 41.00’’
Longitude (West):	84.897222 - 84ˆ 53’ 50.00’’
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	695425.7
UTM Y (Meters):	3704223.5
Elevation:	767 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	33084-D8 WHITESBURG, GA
Version Date:	1982

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

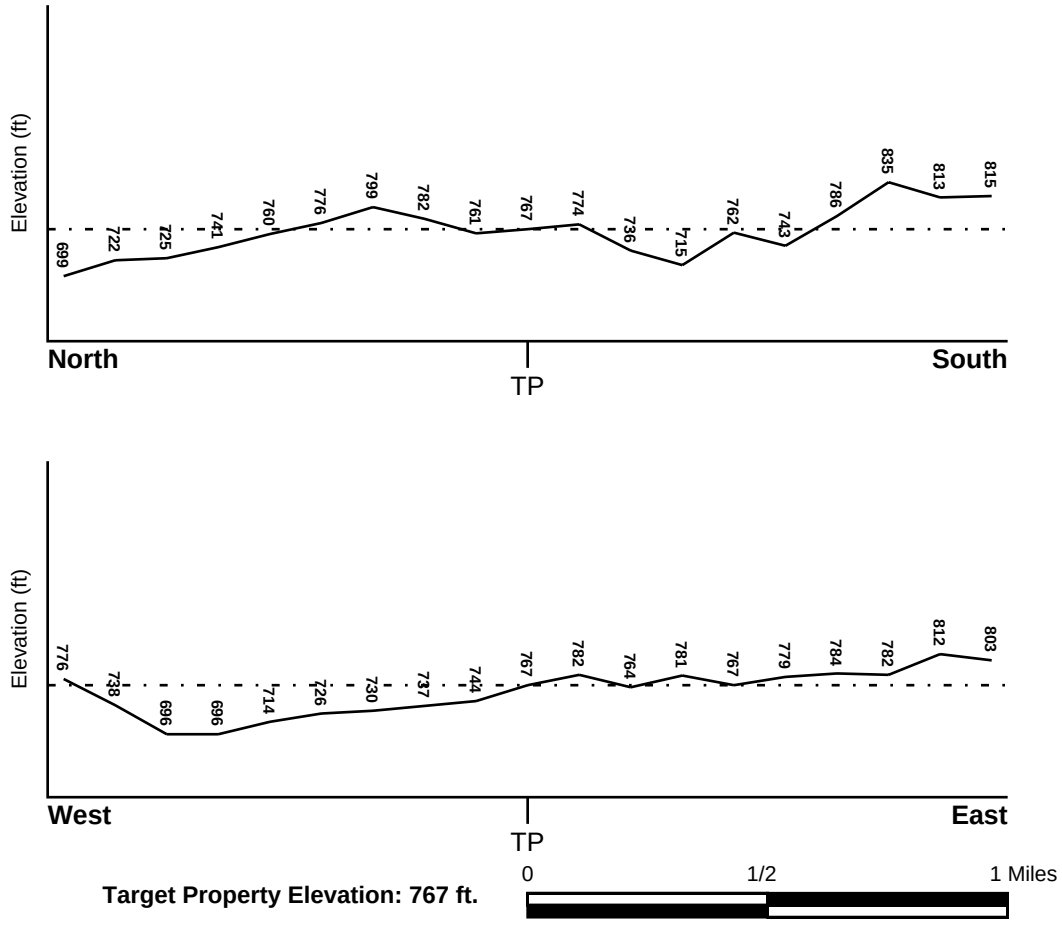
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
13077C0110D	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
13077C0130D	FEMA FIRM Flood data
13077C0120D	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
WHITESBURG	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

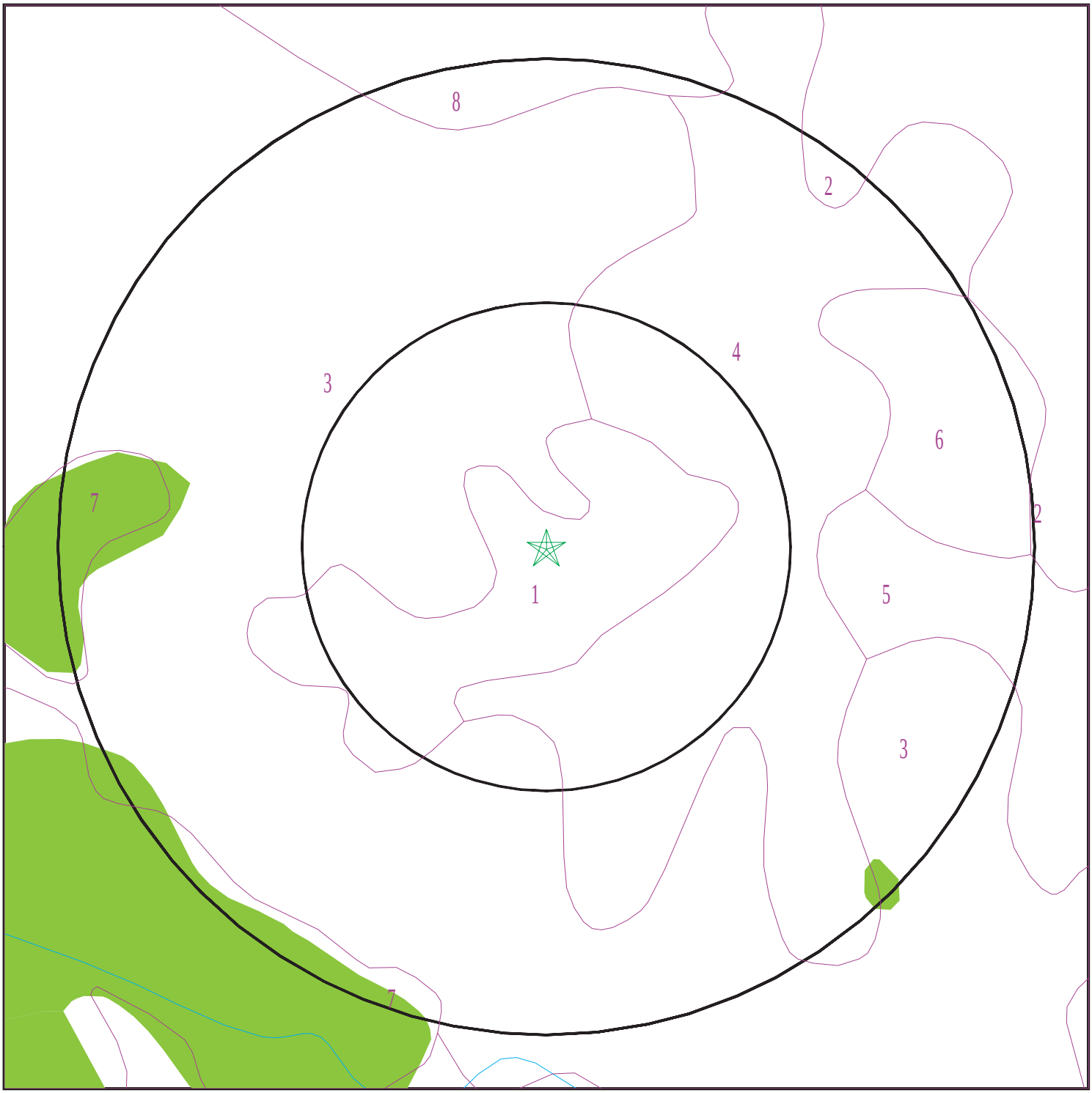
Era:	Paleozoic
System:	Ordovian
Series:	Lower Paleozoic granitic rocks
Code:	Pzg1 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Plutonic and Intrusive Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6772072.1s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	GPC Yates	CLIENT:	ARCADIS U.S., Inc.
ADDRESS:	GPC Yates Newnan GA 30263	CONTACT:	Becky Steever
		INQUIRY #:	6772072.1s
LAT/LONG:	33.461389 / 84.897222	DATE:	December 02, 2021 3:21 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Cecil

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	53 inches	72 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	53 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 2

Soil Component Name: Appling

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	51 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	33 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
4	33 inches	51 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 3

Soil Component Name: Urban land

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 4

Soil Component Name: Cecil

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	53 inches	72 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	53 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 5

Soil Component Name: Appling

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	51 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	33 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
4	33 inches	51 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 6

Soil Component Name: Appling

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	51 inches	64 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	33 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5
4	33 inches	51 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 7

Soil Component Name: Water

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 8

Soil Component Name: Cecil

Soil Surface Texture: sandy clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	53 inches	72 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
2	0 inches	5 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	5 inches	53 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Elastic silt.	Max: 14 Min: 4	Max: 5.5 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	2.000
Federal FRDS PWS	2.000
State Database	2.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000263319	1/8 - 1/4 Mile WNW
B3	USGS40000263313	1/8 - 1/4 Mile East
C6	USGS40000263338	1/4 - 1/2 Mile NW
D9	USGS40000263214	1 - 2 Miles SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

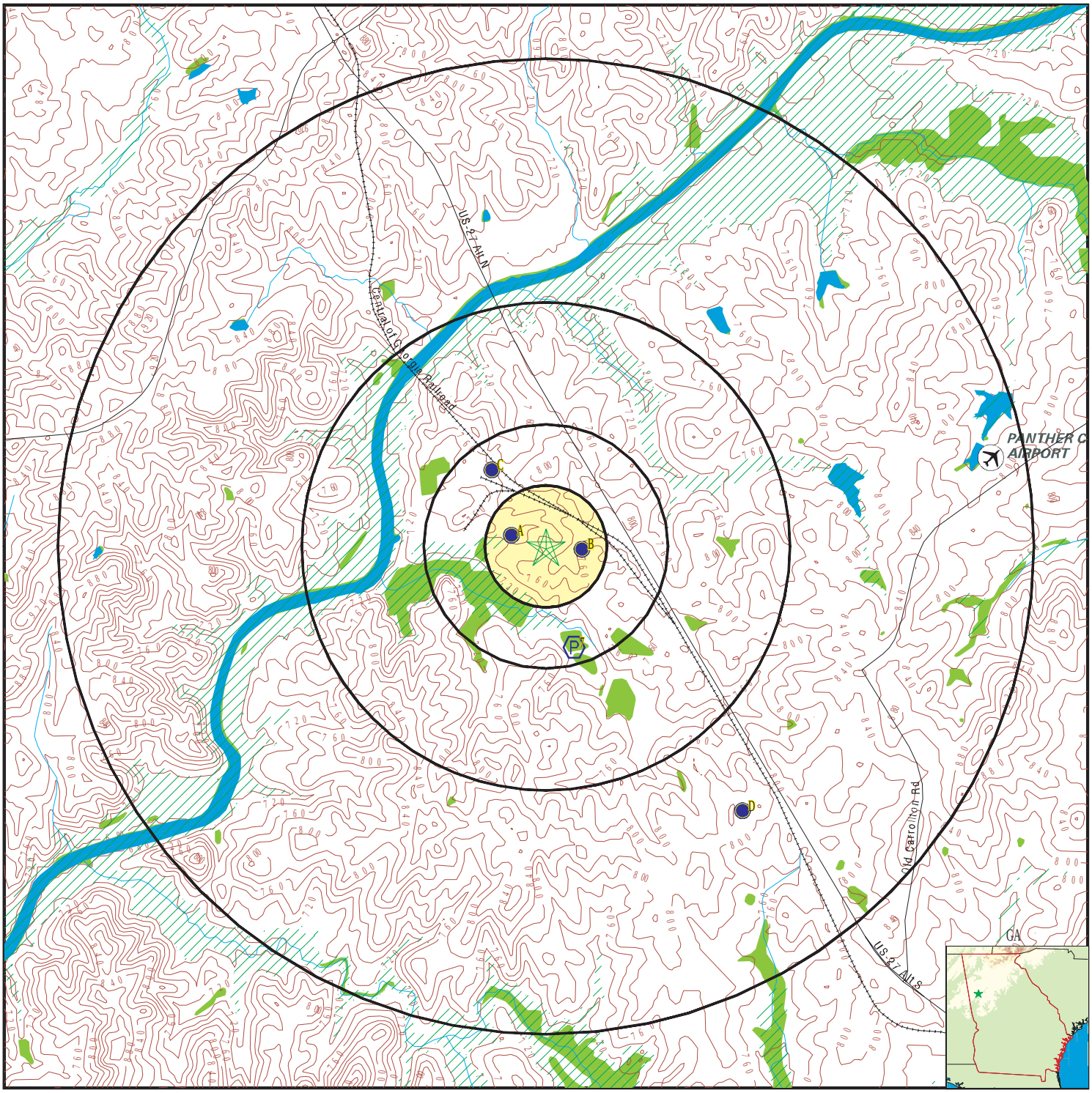
MAP ID	WELL ID	LOCATION FROM TP
7	GA0770020	1/4 - 1/2 Mile SSE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	0000002624	1/8 - 1/4 Mile WNW
B4	0000002623	1/8 - 1/4 Mile East
C5	0000002625	1/4 - 1/2 Mile NW
D8	0000002621	1 - 2 Miles SE

PHYSICAL SETTING SOURCE MAP - 6772072.1s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Wildlife Areas

SITE NAME: GPC Yates	CLIENT: ARCADIS U.S., Inc.
ADDRESS: GPC Yates Newnan GA 30263	CONTACT: Becky Steever
LAT/LONG: 33.461389 / 84.897222	INQUIRY #: 6772072.1s DATE: December 02, 2021 3:20 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
WNW
1/8 - 1/4 Mile
Lower

GA WELLS **0000002624**

County code:	077	Well num:	06BB09
Remarks:	PLANT YATES	Lat:	332743
Lon:	0845359	Latlon datum:	NAD27
Alt:	740.00	Alt datum:	NGVD29
Depth:	307	Depth to casing:	43.00
Casing dia:	6.00	Casing matl:	S
Depth to top:	43.00	Depth to bot:	307.00
Opening type:	X	Constr date:	196509
Discharge:	115.00	Prim use:	N
Aquifer code:	Not Reported	Edr id:	0000002624

A2
WNW
1/8 - 1/4 Mile
Lower

FED USGS **USGS40000263319**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	06BB09	Type:	Well
Description:	PLANT YATES	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19650901
Well Depth:	307	Well Depth Units:	ft
Well Hole Depth:	307	Well Hole Depth Units:	ft

B3
East
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000263313**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	06BB10	Type:	Well
Description:	PLANT YATES	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19710501
Well Depth:	146	Well Depth Units:	ft
Well Hole Depth:	146	Well Hole Depth Units:	ft

B4
East
1/8 - 1/4 Mile
Higher

GA WELLS **0000002623**

County code:	077	Well num:	06BB10
Remarks:	PLANT YATES	Lat:	332740
Lon:	0845341	Latlon datum:	NAD27
Alt:	760.00	Alt datum:	NGVD29

Depth:	146	Depth to casing:	42.00
Casing dia:	6.00	Casing matl:	S
Depth to top:	42.00	Depth to bot:	146.00
Opening type:	X	Constr date:	197105
Discharge:	100.00	Prim use:	N
Aquifer code:	Not Reported	Edr id:	0000002623

C5
NW
1/4 - 1/2 Mile
Lower

GA WELLS **0000002625**

County code:	077	Well num:	06BB08
Remarks:	PLANT YATES	Lat:	332757
Lon:	0845404	Latlon datum:	NAD27
Alt:	760.00	Alt datum:	NGVD29
Depth:	378	Depth to casing:	34.00
Casing dia:	6.00	Casing matl:	S
Depth to top:	34.00	Depth to bot:	378.00
Opening type:	X	Constr date:	197105
Discharge:	50.00	Prim use:	N
Aquifer code:	Not Reported	Edr id:	0000002625

C6
NW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000263338**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	06BB08	Type:	Well
Description:	PLANT YATES	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	19710501
Well Depth:	378	Well Depth Units:	ft
Well Hole Depth:	378	Well Hole Depth Units:	ft

7
SSE
1/4 - 1/2 Mile
Lower

FRDS PWS **GA0770020**

Epa region:	04	State:	GA
Pwsid:	GA0770020	Pwsname:	GEORGIA POWER-PLANT YATES
Cityserved:	Not Reported	Stateserved:	GA
Zipserved:	Not Reported	Fipscounty:	13077
Status:	Closed	Retpopsrvd:	448
Pwssvcconn:	6	Psource longname:	Groundwater
Pwstype:	NTNCWS	Owner:	Private
Contact:	GEORGIA POWER-PLANT YATES	Contactorgname:	Not Reported
Contactphone:	706-253-2111	Contactaddress1:	GEORGIA POWER-PLANT YATES
Contactaddress2:	708 DYER ROAD	Contactcity:	NEWNAN
Contactstate:	GA	Contactzip:	302633733
Pwsactivitycode:	I		

Pwsid:	GA0770020	Facid:	101T
Facname:	DRILLED WELL #1	Factype:	Treatment_plant

Facactivitycode:	I	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP
Pwsid:	GA0770020	Facid:	102T
Facname:	DRILLED WELL #2	Factype:	Treatment_plant
Facactivitycode:	I	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP
Pwsid:	GA0770020	Facid:	103T
Facname:	DRILLED WELL #3	Factype:	Treatment_plant
Facactivitycode:	I	Trtobjective:	disinfection
Trtprocess:	hypochlorination, post	Factypecode:	TP
PWS ID:	GA0770020	PWS type:	Not Reported
PWS name:	Not Reported	PWS address:	Not Reported
PWS city:	Not Reported	PWS state:	Not Reported
PWS zip:	Not Reported	PWS ID:	GA0770020
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00000448
System name:	GEORGIA POWER-PLANT YATES	System address:	GEORGIA POWER PLANT YATES
System address:	708 DYER RD	System city:	NEWNAN
System state:	GA	System zip:	30263
Population served:	101 - 500 Persons	Treatment:	Treated
Latitude:	334500	Longitude:	0842312
Latitude:	332719	Longitude:	0845343

D8
SE
1 - 2 Miles
Higher

GA WELLS **0000002621**

County code:	077	Well num:	06BB16
Remarks:	ALLEN, A L	Lat:	332644
Lon:	0845300	Latlon datum:	NAD27
Alt:	812.00	Alt datum:	NGVD29
Depth:	132	Depth to casing:	Not Reported
Casing dia:	Not Reported	Casing matl:	Not Reported
Depth to top:	Not Reported	Depth to bot:	Not Reported
Opening type:	Not Reported	Constr date:	Not Reported
Discharge:	Not Reported	Prim use:	H
Aquifer code:	320CRSL	Edr id:	0000002621

D9
SE
1 - 2 Miles
Higher

FED USGS **USGS40000263214**

Organization ID:	USGS-GA	Organization Name:	USGS Georgia Water Science Center
Monitor Location:	06BB16	Type:	Well
Description:	ALLEN, A L	HUC:	03130002
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Piedmont and Blue Ridge crystalline-rock aquifers		
Formation Type:	Crystalline Rocks	Aquifer Type:	Confined single aquifer
Construction Date:	1958	Well Depth:	132
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels,Number of Measurements:	1	Level reading date:	1958
Feet below surface:	26.00	Feet to sea level:	Not Reported
Note:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for COWETA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 30263

Number of sites tested: 9

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.989 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory
Source: Georgia GIS Clearinghouse
Telephone: 706-542-1581

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Georgia Public Supply Wells
Source: Georgia Department of Community Affairs
Telephone: 404-894-0127

USGS Georgia Water Wells
Source: USGS, Georgia District Office
Telephone: 770-903-9100

OTHER STATE DATABASE INFORMATION

DNR Managed Lands
Source: Department of Natural Resources
Telephone: 706-557-3032
This dataset provides 1:24,000-scale data depicting boundaries of land parcels making up the public lands managed by the Georgia Department of Natural Resources (GDNR). It includes polygon representations of State Parks, State Historic Parks, State Conservation Parks, State Historic Sites, Wildlife Management Areas, Public Fishing Areas, Fish Hatcheries, Natural Areas and other specially-designated areas. The data were collected and located by the Georgia Department of Natural Resources. Boundaries were digitized from survey plats or other information.

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

Attachment 2

Geophysical Borehole Logging Memo

Memo

SUBJECT
Geophysical Borehole Logging
Georgia Power Plant Yates – AMA-R6 Landfill

TO
File

DATE
November 16, 2021

PROJECT NUMBER
30052922.00002

DEPARTMENT
Environment

NAME
Gabriel Hebert, MSc
317.694.3727
gabriel.hebert@arcadis.com

COPIES TO
Geoffrey Gay
Tom Darby

Arcadis has prepared this technical memo to document the geophysical borehole investigation performed to provide additional characterization of potential fracture zones present within borehole BH-52, located at the Georgia Power Plant Yates in Newnan Georgia AMA-R6 Landfill (Site). The objective of this borehole investigation was to improve understanding of the presence and characteristics of the fractures that control the distribution of selenium detected in the deeper portions of the bedrock beneath the Site from the discrete interval sampling during the installation of PZ-37D. The geophysical logs collected in BH-52, as well as the associated packer test data, are being used to supplement the Site conceptual site model (CSM) and provide additional lines of evidence to support remedy selection. The geophysical field activities were conducted on September 9, 2021.

Geophysical Logging Equipment

Arcadis collected borehole geophysical logs using a portable Matrix system manufactured by the Mount Sopris Instrument Company in Golden, Colorado. This system is a digital, multi-channel system designed primarily for shallow environmental and engineering studies. The logging system consists of two primary components. The first is the integrated logging control unit, which remains at the surface with the equipment operator, and the second component is the downhole-logging probe. The control unit is joined physically and electronically to the chosen downhole probe with a steel cable, approximately 600 feet in length, containing a single insulated wire. The steel cable is spooled on an integrated electric winch mechanism. The downhole position of the probe is measured to a precision of 0.01 feet with a digital odometer. The electrical signals transmitted by the downhole probe are passed from the winch to a signal processor within the logging unit. The processed digital data collected include the probe depth, speed, and the probe-specific measurements of the borehole. The data are recorded in a portable computer for real-time viewing, and storage for later analysis.

The geophysical probes utilized on this project include:

1. Fluid Temperature/Resistivity probe;
2. Three-Arm Caliper probe;
3. Acoustic Televiewer probe;
4. Optical Televiewer probe;

5. Vertical Flow/Heat Pulse Flow probe;

Data from these probes were collected in a near-continuous manner in the borehole from the ground surface to approximately 200 feet below ground surface (BGS) at a near-constant speed ranging from 5 to 15 feet per minute, depending on the probe. The individual probes are discussed in the subsections below.

Fluid Temperature/Resistivity Probe

A Mount Sopris 2WQA-1000 fluid temperature/resistivity probe was used to provide borehole fluid temperature and fluid resistivity measurements. The standard temperature log, based on a thermister, is designed to provide a measure of the ambient geothermal gradient, but is also helpful in detecting anomalies caused by events such as fluid flow into the borehole. The borehole fluid resistivity is directly proportional to the concentration of dissolved minerals. It is generally used in hydrogeology to determine the concentration of dissolved ions in the aquifers and to locate the fluid flows occurring in the borehole, especially if some time has passed and the temperature features have dissipated.

Three-arm Caliper Probe

A Mount Sopris 2PCA-1000 three-arm caliper probe was used to provide detailed information on the nominal diameter of the borehole. Once the probe has been lowered to the bottom of the boring, three spring arms expand into the open boring and provide a measure of the effective diameter of the boring. Several, valuable pieces of information can be derived from the three-arm caliper log. In the open bedrock portions of the boring, the locations of potential changes in rock type and the locations of fracture zones can be interpreted. Generally, fractured rock is less resistant to mechanical forces with the result that borehole diameter will be enlarged by the drilling/coring process in fracture zones. A larger, more irregular boring diameter will be indicated on the logs in fracture zones. In contrast, more competent rock will tend to have a much smoother appearance near the drilled borehole diameter.

Acoustic Televiewer Probe

An ABI40 AcousticTeleviewer (MK2) manufactured by Advanced Logic Technology (ALT) was used to image the bedrock fractures within the borehole. An acoustic televiewer probe works by emitting ultrasonic energy pulses at a frequency of approximately 1.2MHz. These ultrasonic pulses travels outward from the probe, through the borehole fluid, to the borehole wall, where a part of the pulse gets reflected back towards the probe, and the rest of it continues through the bedrock with a different velocity. The travel time and the amplitude of reflected energy are utilized to image the borehole wall and may also provide some information about the orientation of the fracture zones within the borehole. Generally, hard, competent rock reflects much more of the acoustic energy back (higher reflection amplitude = light gray in color) to the probe than softer, weathered/fractured rock, which tends absorb, transmit, or scatter most of the energy (lower reflection amplitude = black in color).

Optical Televiewer Probe

An OBI40 Optical Televiewer (MK4) manufactured by Advanced Logic Technology was also used to image the bedrock fractures within the borehole. The optical televiewer utilizes a high resolution digital image sensor combined with a fisheye lens to produce a 360° continuously upwrapped digital picture of the borehole wall, either in air or clear borehole fluid. Once this high resolution visual image of the borehole wall is scanned, it can be utilized for lithological, mineralogical, and structural analyses of the borehole..

Vertical Flow/Heat Pulse Flow Probe

While the other probes were used to characterize the vertical exent and delineate the various fracture zones present within the borehole, the Mount Sopris HFP-2293 heat pulse flow meter (HPFM) was used to determine the approximate rate of vertical fluid flow emanating from the fracture zones. Vertical fluid flow within a borehole is typically caused by the difference in hydraulic head between a fracture with high head to a fracture with low head, although temperature/density variations within the fluid emanating from a given fracture can also contribute to vertical flow. The heat pulse flow probe consists of a central conductor, which triggers the heat pulse, and two sensors at both the upper and lower end of the probe. The central conductor generates a heat pulse, which heats a volume of fluid (water in this case) next to the conductor in borehole, and depending upon the vertical flow of water (or lack thereof) in the borehole, the volume of warm water is detected at either the upper (upward flow = positive values) or lower sensors (downward flow = negative values). The peak temperature difference and time taken by the volume of water to travel from the center to one of the sensors is recorded in a computer at the surface, which is then used to determine the flow rate within a given depth interval of the borehole. For this project, heat pulse flow data was collected both under ambient, as well as pumping conditions.

Results and Interpretations

After data collection, the borehole geophysical logs were downloaded to a PC, converted from the binary format to a usable Microsoft Excel format, then filtered and statistically correlated using Grapher (ver.11) by Golden Software. The filtered logs were then imported into WellCad (ver.5.1) for final processing and plotting.

The final borehole logs are included on the compiled geophysical log of BH-52, which is presented in **Attachment A**. In general, the borehole datasets correlate well with rock cuttings observed during drilling, and with each other: fracture zones detected on the caliper logs correspond with zones of decreased reflection amplitude in the acoustic televiewer and images of fractures on the optical televiewer. Fluid temperature and resistivty remained relatively consistent throughout the borehole. The HPFM data indicated that groundwater flow from the detected fracture zones was observed to be upward, ranging from 0.01 up to 0.08 gallons per minute (gpm) under ambient conditions and 0.57 gpm under pumping conditions of approximately 0.5 gpm.

In addition to the general compiled geophysical log of BH-52, the acoustic televiewer log, optical televiewer log, and heat pulse flow data were included in the structural log interpretation of BH-52, which is also included in **Attachment A**. Foliations and fractures were identified from the acoustic and optical televiewer data as sinusoidal features. Those features with a with low amplitude acoustic televiewer response, in combination with the heat pulse flow data and changes in borehole diameter based on the caliper log, were interpretated as potentially open fractures. The orientation (strike and dip) of the fractures encountered is detailed in the structural log interpretation of BH-52 (**Attachment A**) and the HPFM data was found to generally correlate to the degree of fracturing. Finally, a statistical analysis of the orientations of the geologic structures and fractures is presented in **Figures 1A-2B** below in two formats: histograms and rose diagrams. These figures present a combined visual representation of the strike and dip angles of the fractures encountered in the borehole geophysical logs. An inspection of **Figures 1A – 2B** shows that the majority of the fractures observed in BH-52 are oriented towards the southeast (average azimuth of 120 degrees), and that the average dip angle of these fractures is approximately 25 degrees. By comparing

these figures with fracture data from adjacent boreholes located within the AMA-R6 landfill area, one can make inferences regarding the interconnectivity of various fracture zones across the site.

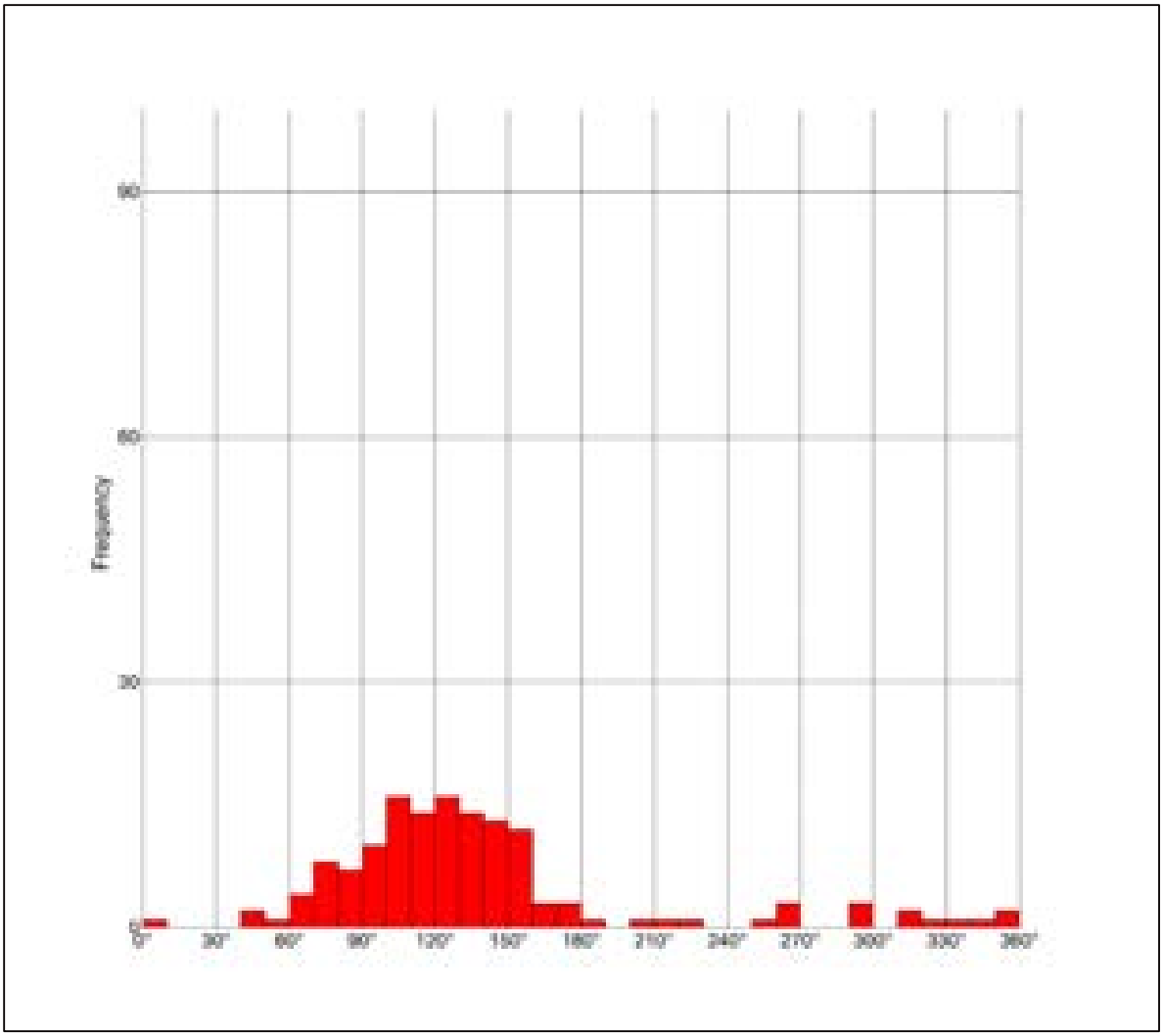


Figure 1A: Structure Azimuth Histogram

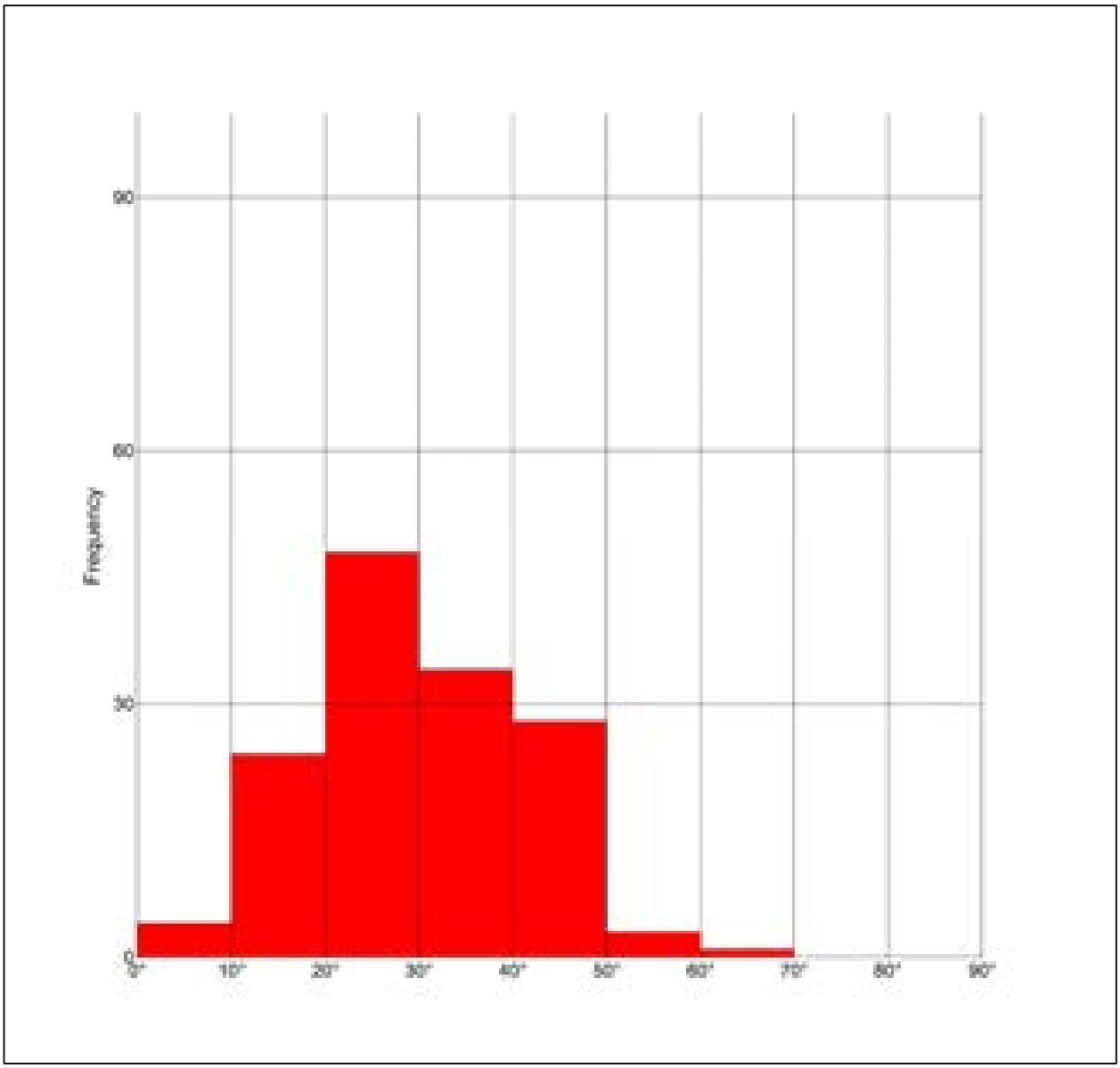


Figure 1B: Structure Dip Histogram

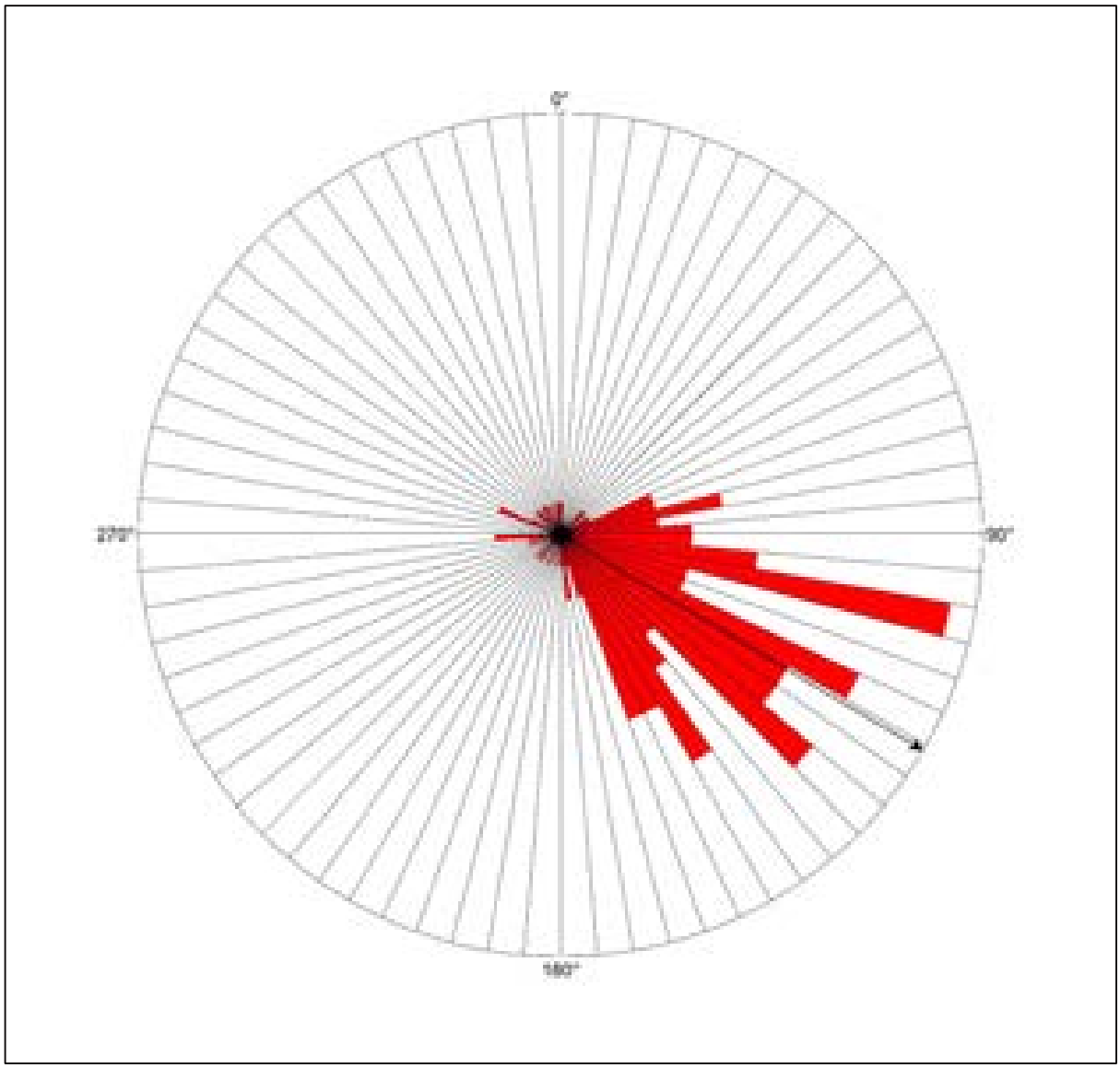


Figure 2A: Structure Azimuth Rose Diagram

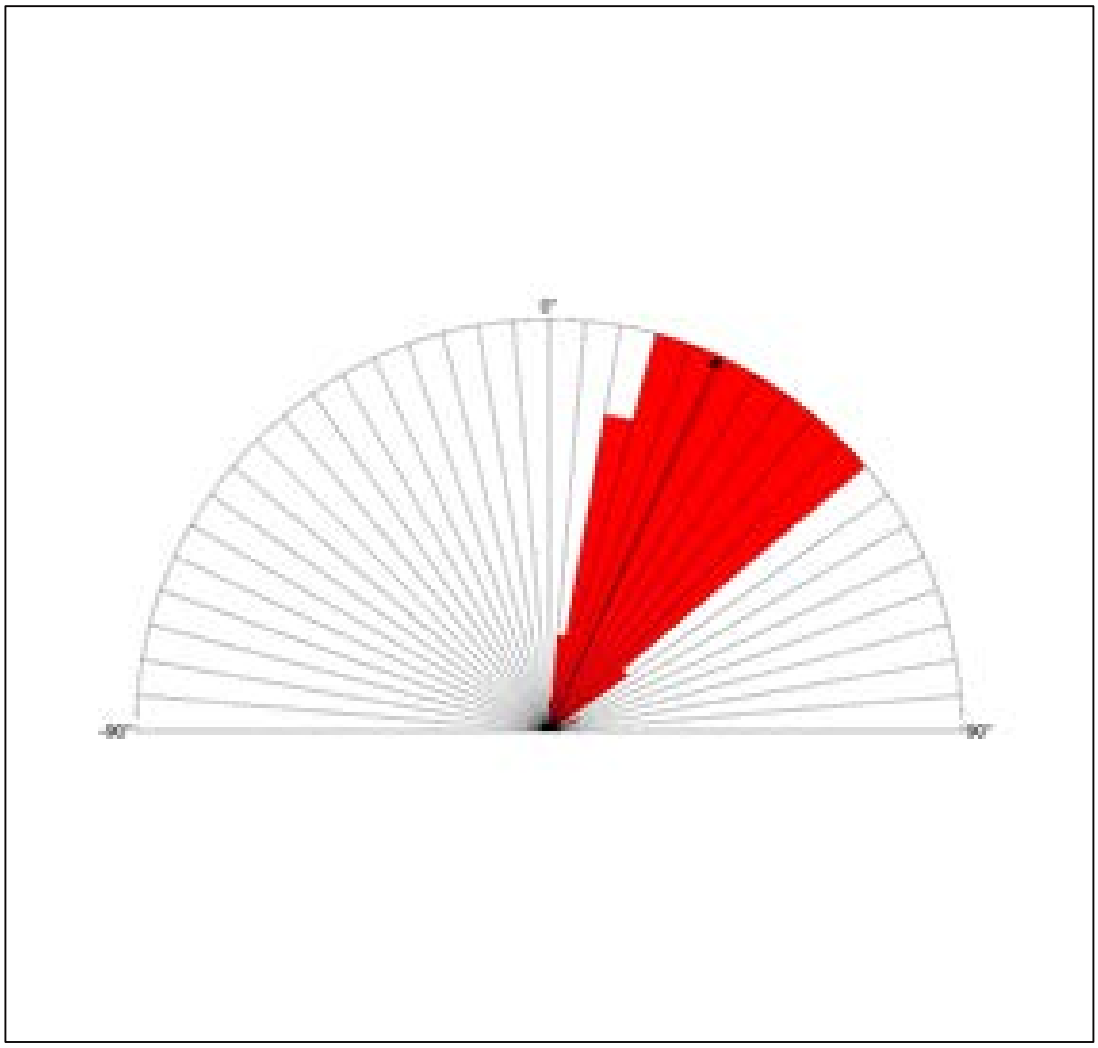


Figure 2B: Structure Dip Rose Diagram

Conclusions

Arcadis performed a limited borehole geophysical investigation of BH-52, located at the AMA-R6 Landfill of Plant Yates for the purpose of obtaining additional characterization of potential fracture zones that may be controlling/contributing to the distribution of selenium within the bedrock aquifer located beneath the Site. In summary, structural features (predominantly foliation with some fractures) were observed at various orientations and dips, although the majority of the zones with potential open fractures trended to the southeast, with an average dip angle of 25 degrees. Groundwater flow from these fractures was observed to be upward, ranging from 0.01 up to 0.08 gallons per minute (gpm) under ambient conditions and 0.57 gpm under pumping conditions. As such, these data were successful in assisting the selection of the packer test intervals within the borehole, borehole and provide additional lines of evidence to further refine the understanding of bedrock structure beneath the site. This memo includes a limited set of data within the project site. The conclusions drawn from this investigation are considered

reliable; however, there may exist localized variations in the subsurface conditions that have not been completely defined at this time.

Figures

1A: Structure Azimuth Histogram
1B: Structure Azimuth Rose Diagram
2A: Structure Tilt Histogram
2B: Structure Tilt Rose Diagram

Attachment A

1: BH-52 Borehole Log
2: BH-52 Structural Log Interpretation

Attachment A

BH-52 Borehole Log & Structural Interpretation

Arcadis U.S., Inc.
1728 3rd Avenue North, Suite 300
Birmingham, Alabama 35203

Geophysical Logging Services

WELL NAME: BH-52 **CLIENT:** Georgia Power

PROJECT LOCATION: Georgia Power Plant Yates, Nenman, GA

WELL COORDINATES:

PROJECTION:

SURFACE ELEVATION:

CASING STICK-UP: 1.21'

DEPTH TO GROUNDWATER: 4.50' BTOC

CASING DIAM.: 6&3/8" **LENGTH:** 54'

O.H. DIAM.: 6&3/4" **FROM:** 54' **TO:** 200'

DATE LOGGED: 09/09/2021

LOGGED BY: Arcadis

CASING TYPE: PVC

TOTAL DEPTH: 200'

REMARKS:

Processing Notes:
• Declination: 4°58'W (-4.967° rotation to OTV and ATV)
• Black streaks on OTV log produced from sediment on OTV lense
• Engineering Column Notes:
Blue in Outercasing = Groundwater Drawdown
Light Blue in Outercasing = Water Column in PVC casing
Light Blue inside borehole = Water Column in Open Borehole

Logging Probes Used

- [ ] Natural Gamma [ ] SPR/SP
- [x] Fluid Temperature/Resistivity
- [ ] Induction Conductivity
- [ ] Normal Resistivity
- [x] 3-Arm Caliper
- [x] Acoustic Televiewer
- [x] Optical Televiewer
- [x] Heat Pulse Flow Meter
- [ ] Spinner Flow Meter
- [ ] Spectral Gamma
- [ ] Full Waveform Sonic
- [ ] Nuclear Magnetic Resonance
- [ ] Other: _____

Depth (1ft:20ft) | Engineering | Temperature 15 deg C 25 | FRes 0 Ohm-m 100 | Temperature Gradient -2 deg/ft 1 | Fluid Resistivity Gradient -100 ohm-m/ft 100 | Ambient Flow -0.2 gpm 0.2 | Pumped Flow -1.5 gpm 1.5 | Caliper 4.5 in 7 | Amplitude (TN) 0 2000 0° 90° 180° 270° 0° | Optical Televiewer (TN) 0° 90° 180° 270° 0°

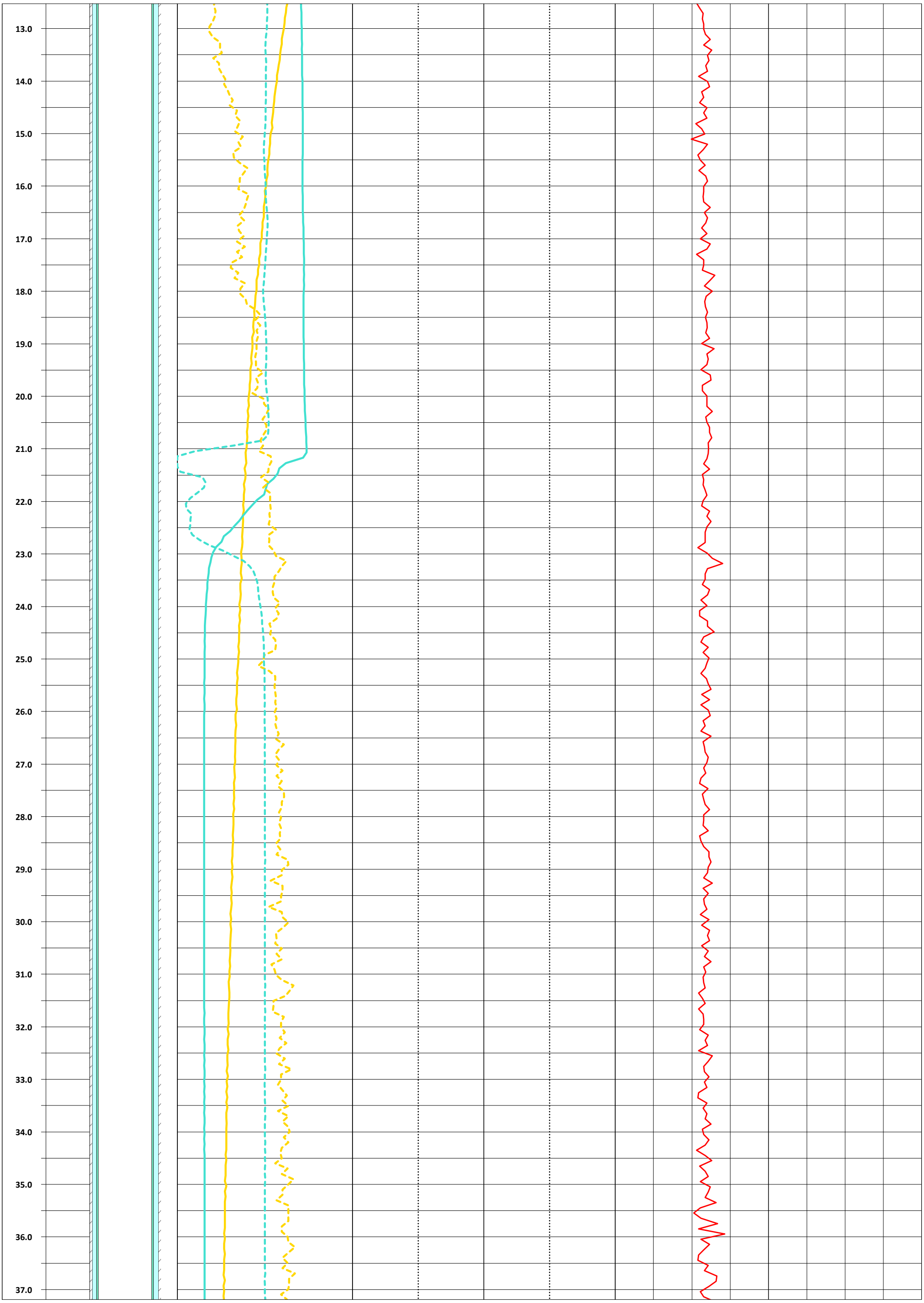
Static water level with pump and tooling = 4.59' BGS

Pump set at 45' BGS

Test start at 17:02

Pumping @ 0.5 gpm for 193', 180', 169', and 160'. Pump rate increased to 0.75 gpm for 155-49'

Test end at 17:50
Total volume pumped = ~34gal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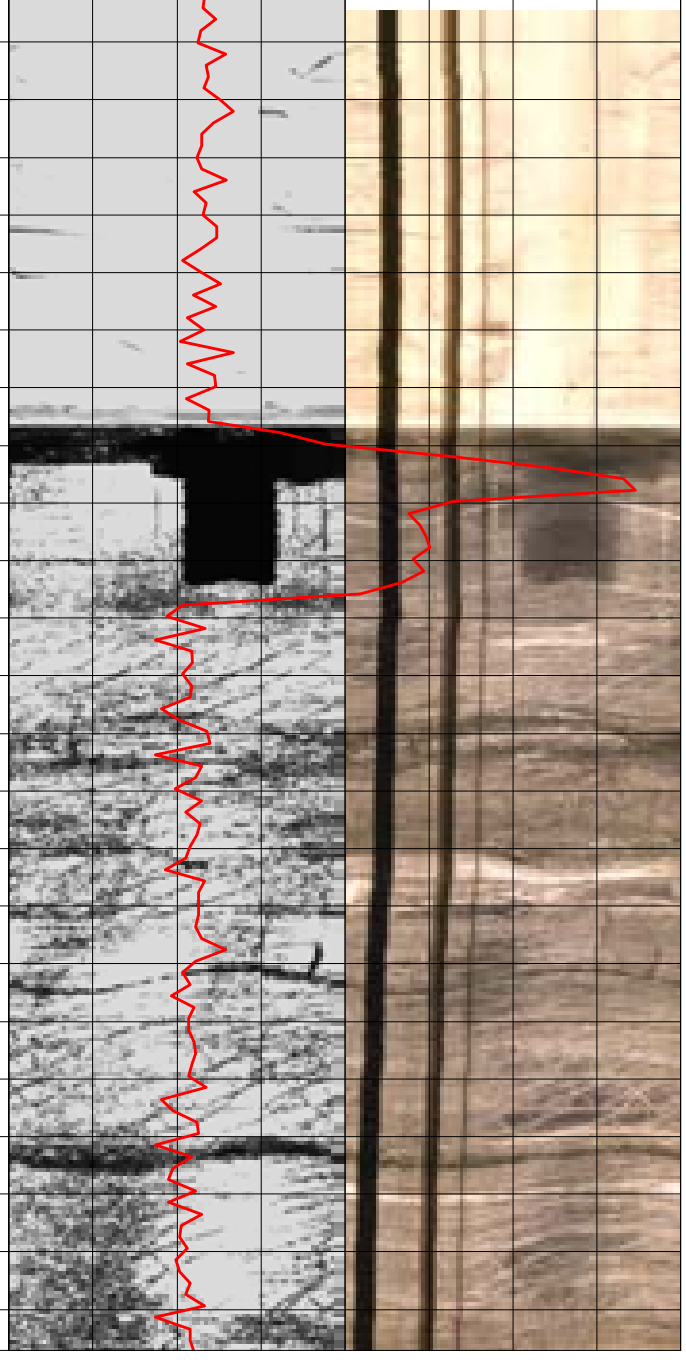

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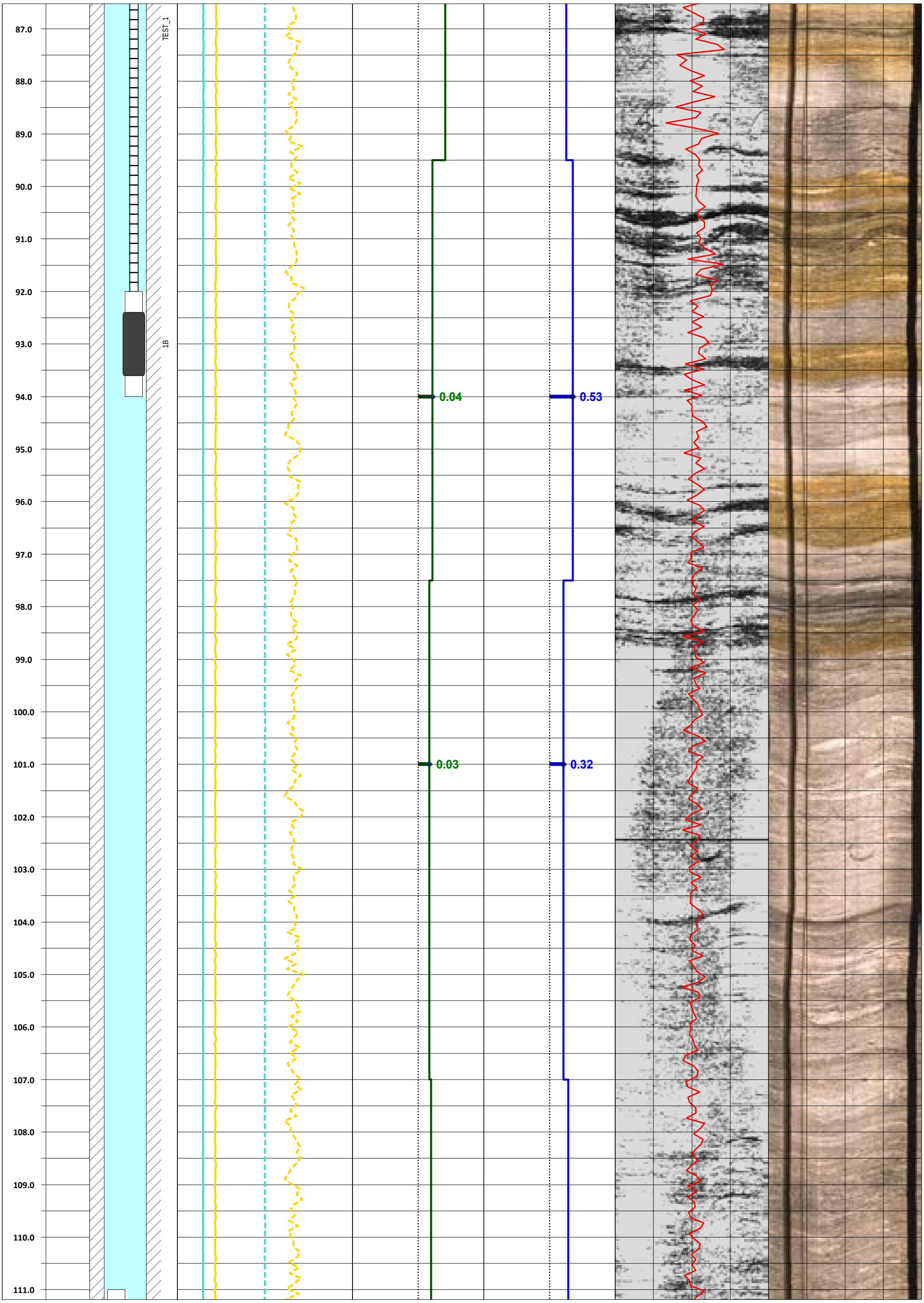
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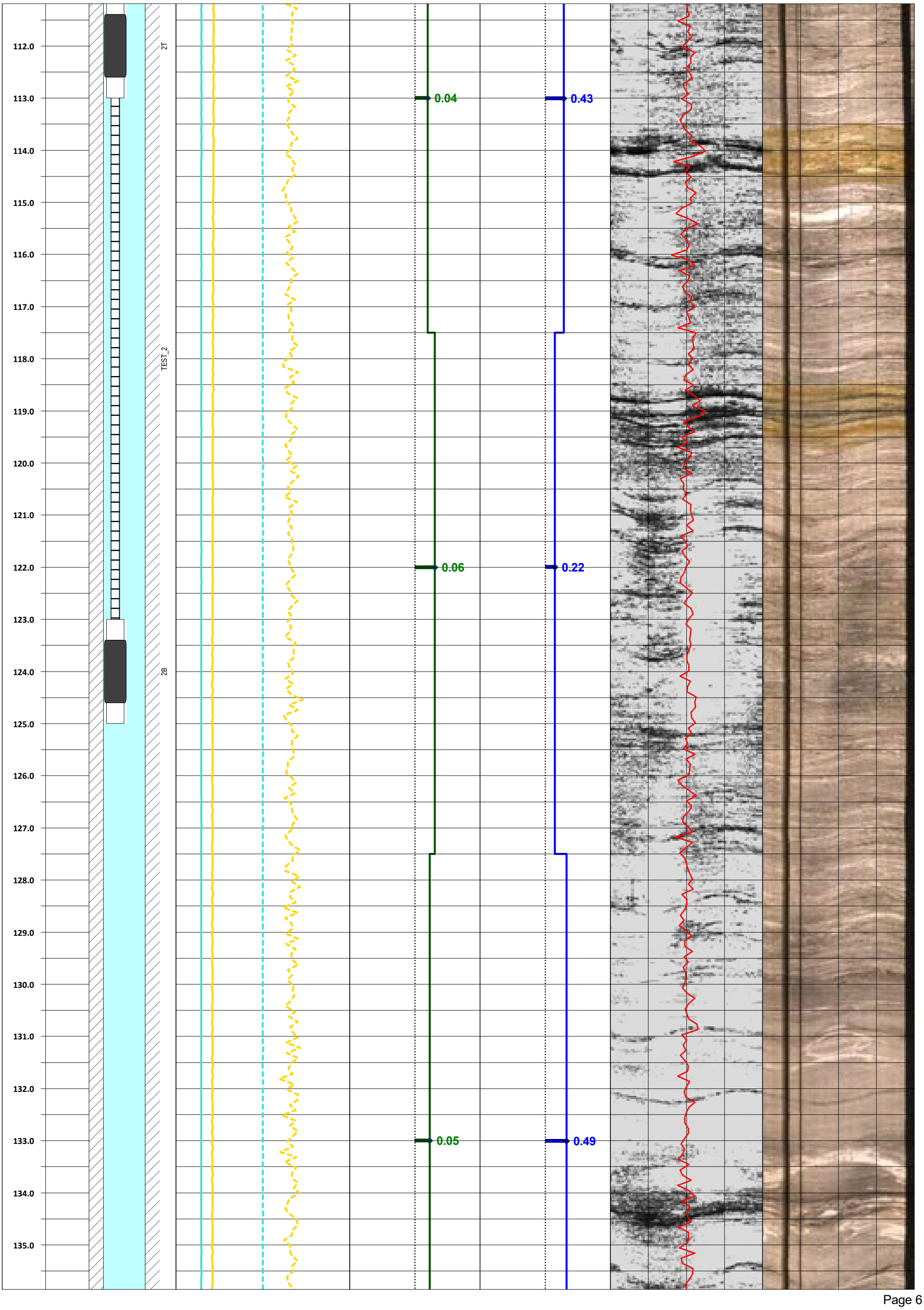
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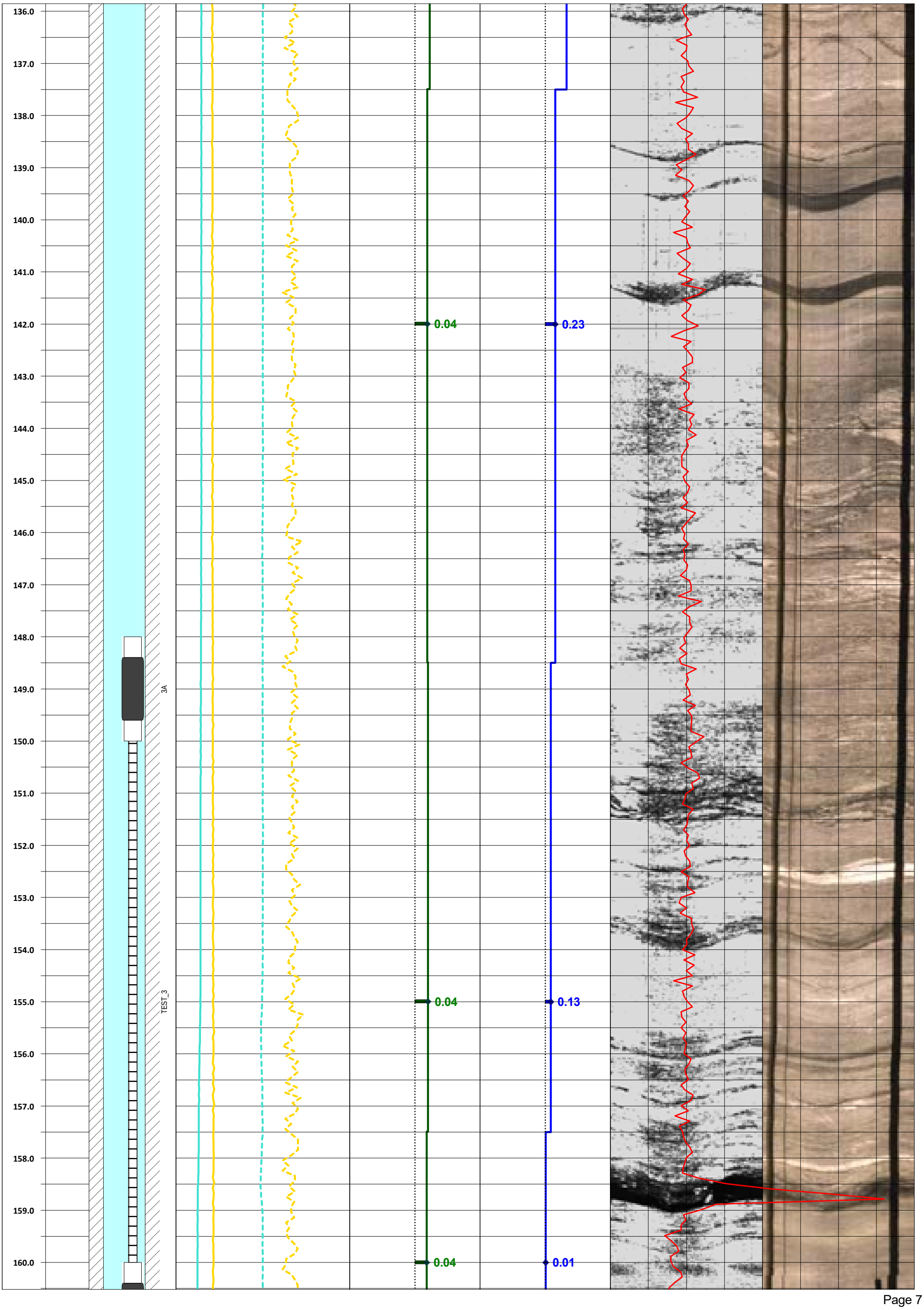
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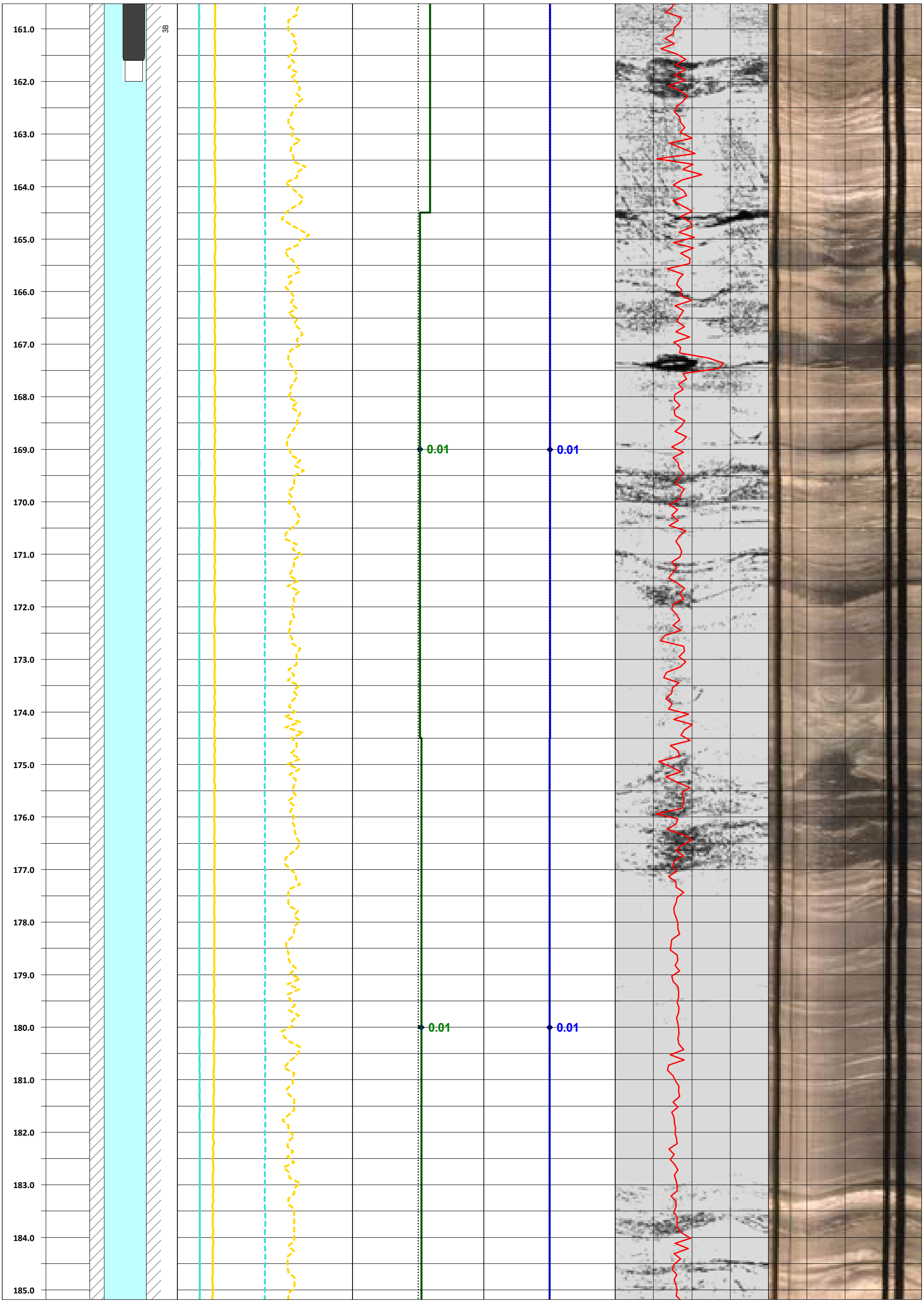
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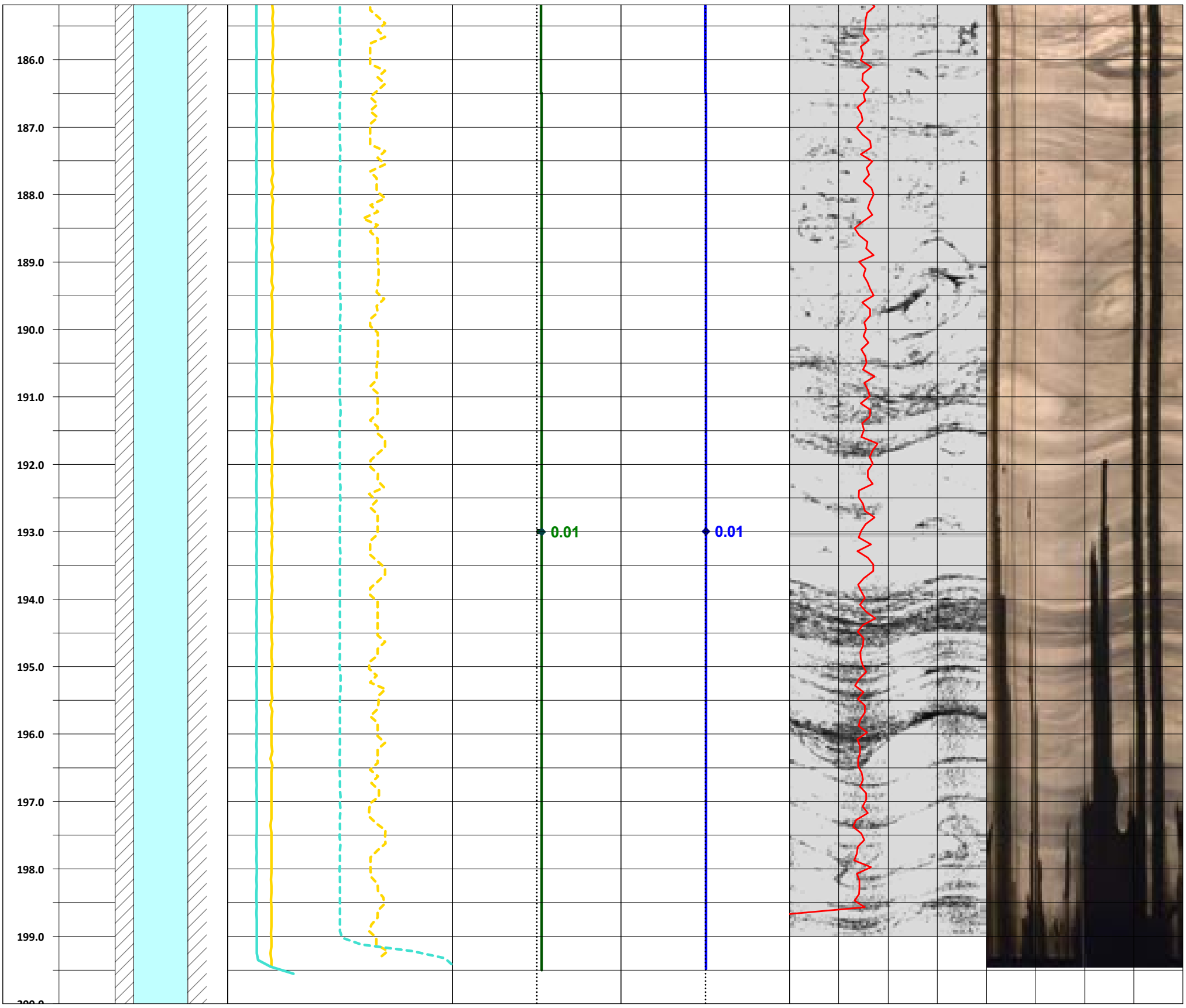
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STRUCTURAL LOG INTERPRETATION

Well Name:	BH-52	**Client:**	Georgia Power
Date Logged:	9/09/2021	**Project:**	
Logger:	Arcadis	**Location:**	Georgia Power Plant Yates, Nenman, GA

Structure Legend - Fracture Azimuth Quadrant

0 to 90 | 90 to 180 | 180 to 270 | 270 to 360

Depth 1ft:10ft	ATV Amplitude - True North View From: 180°	Optical Televiewer - True North View From: 180°	Fracture Azimuth and Dip 0 Dip in Degrees from Horizontal 90	Pumped Flow 0 gpm 1
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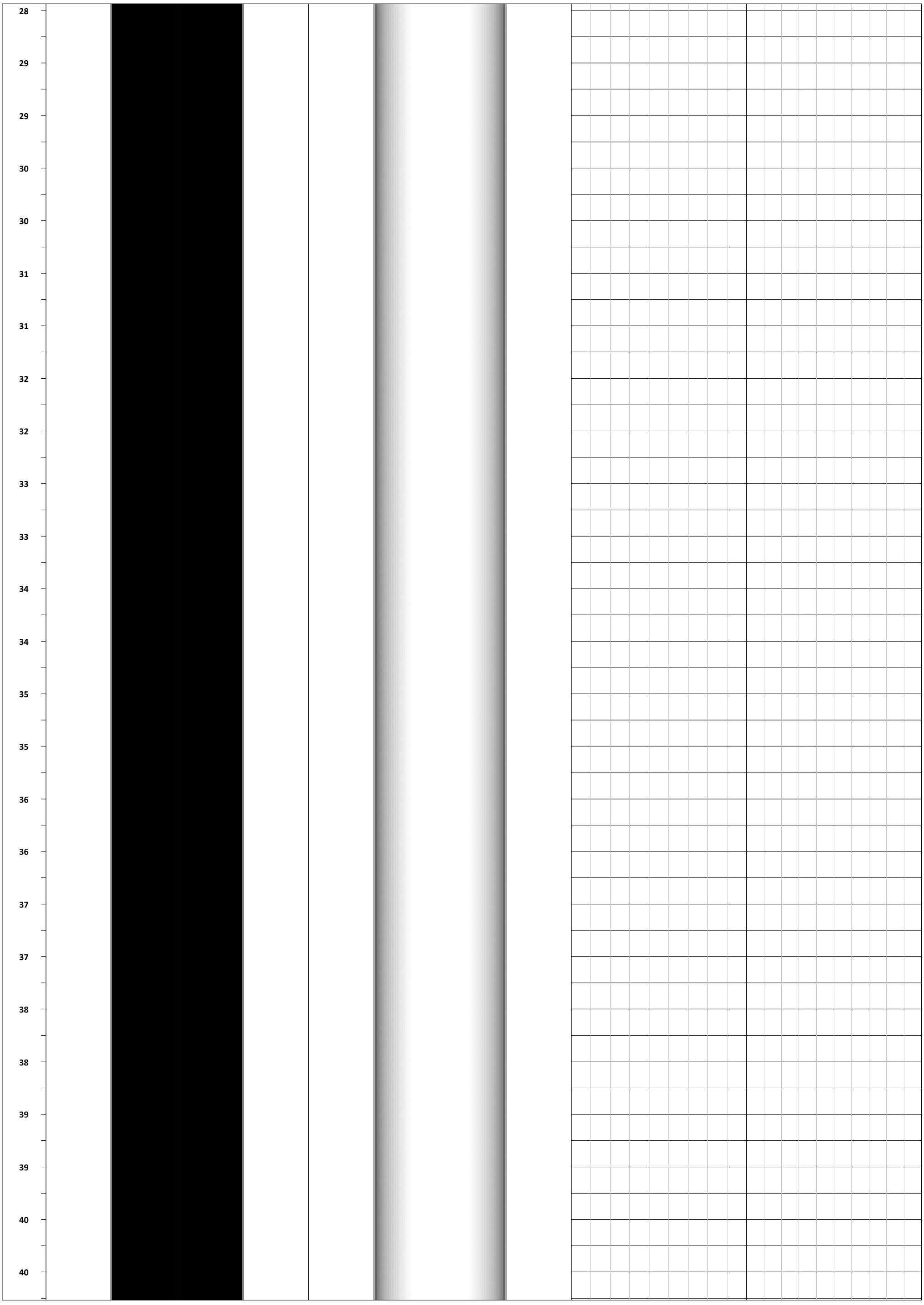
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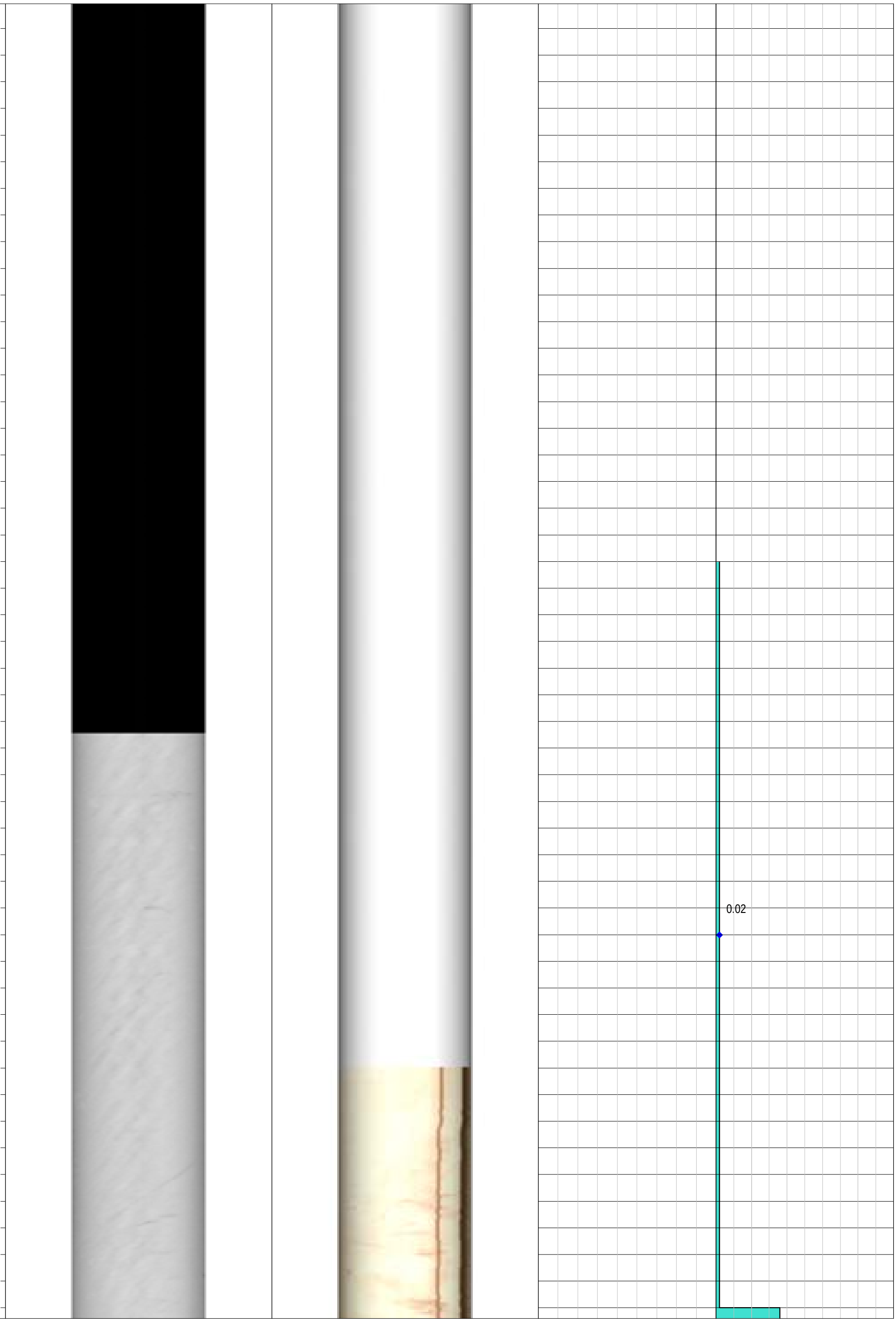

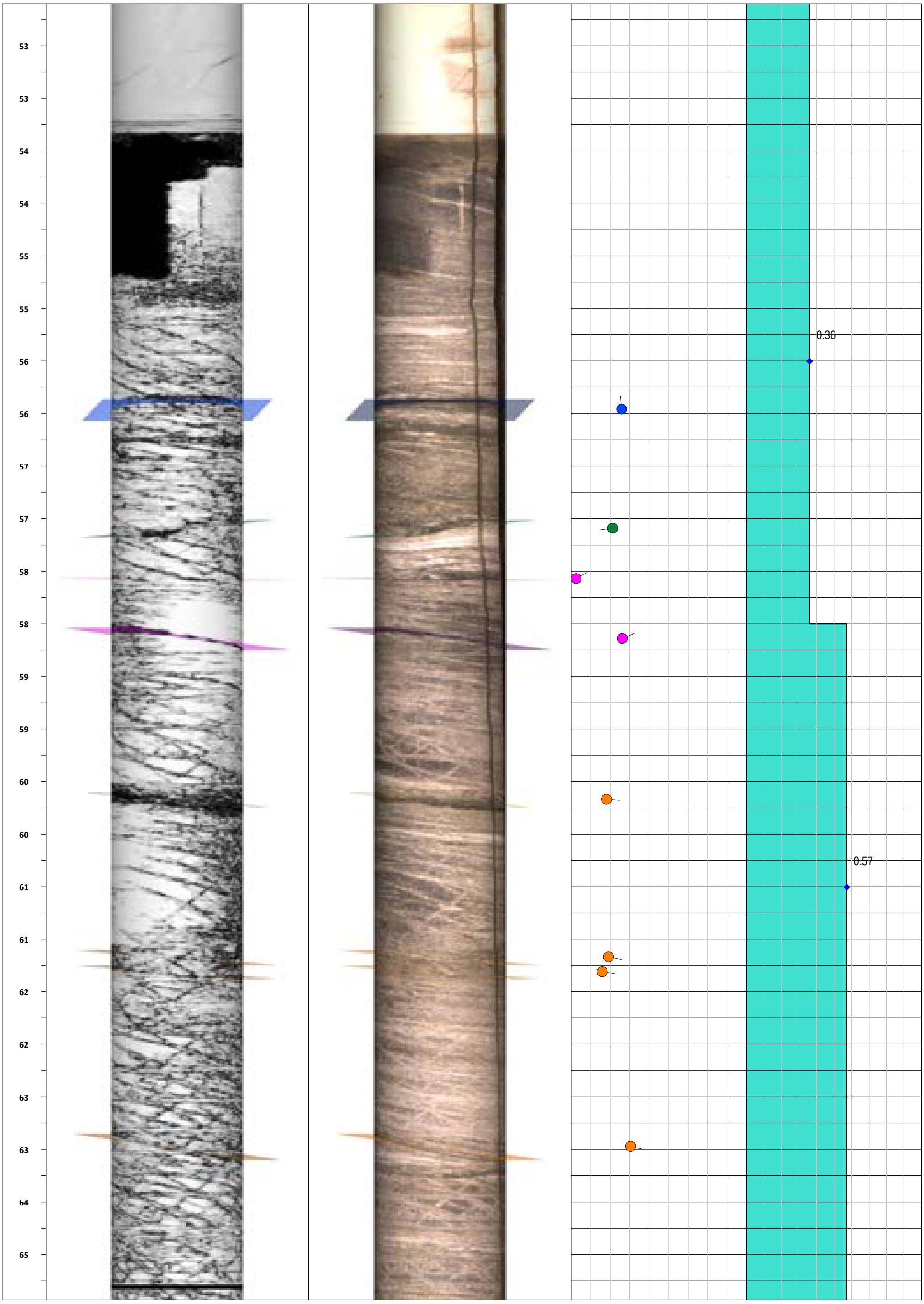
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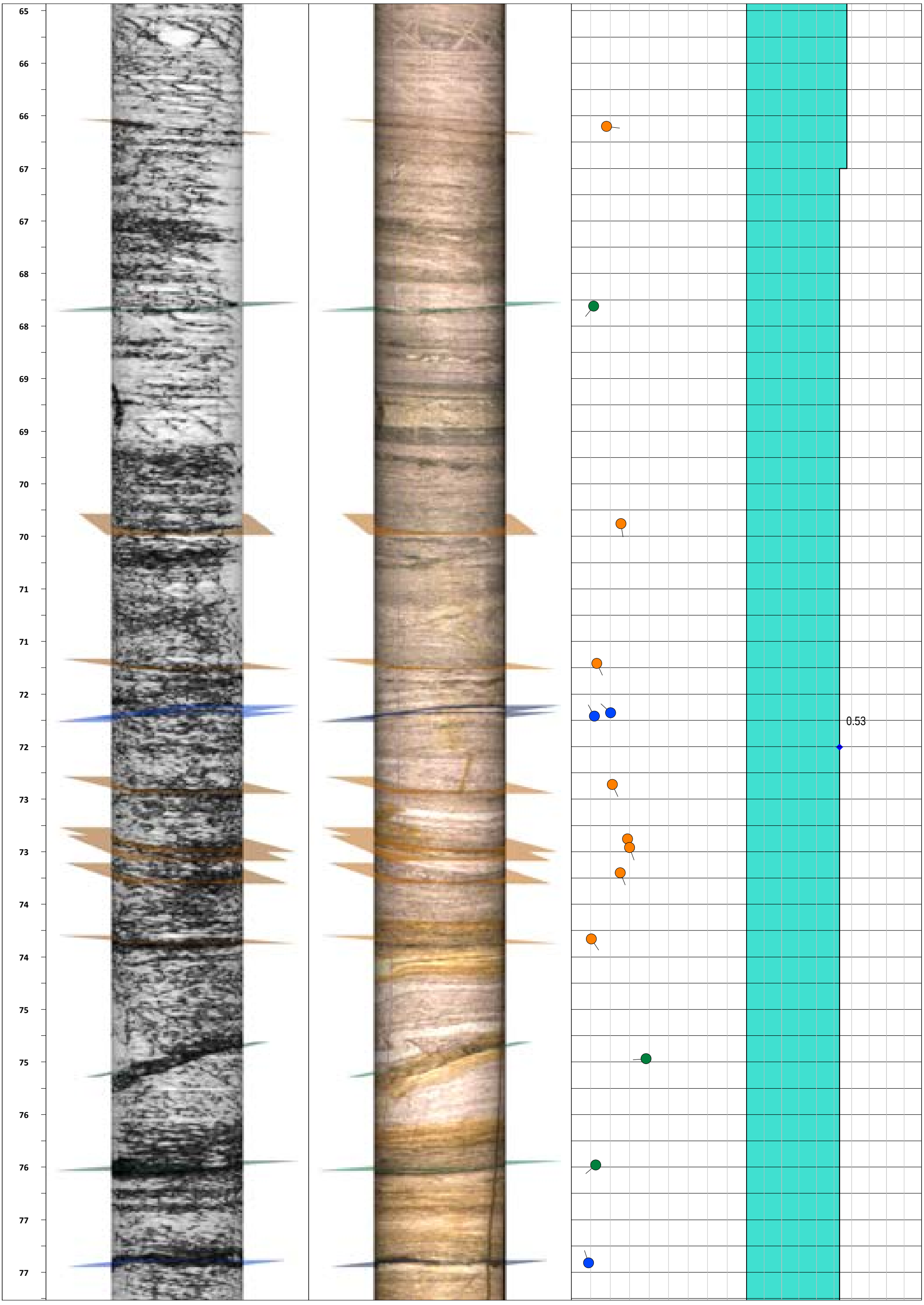
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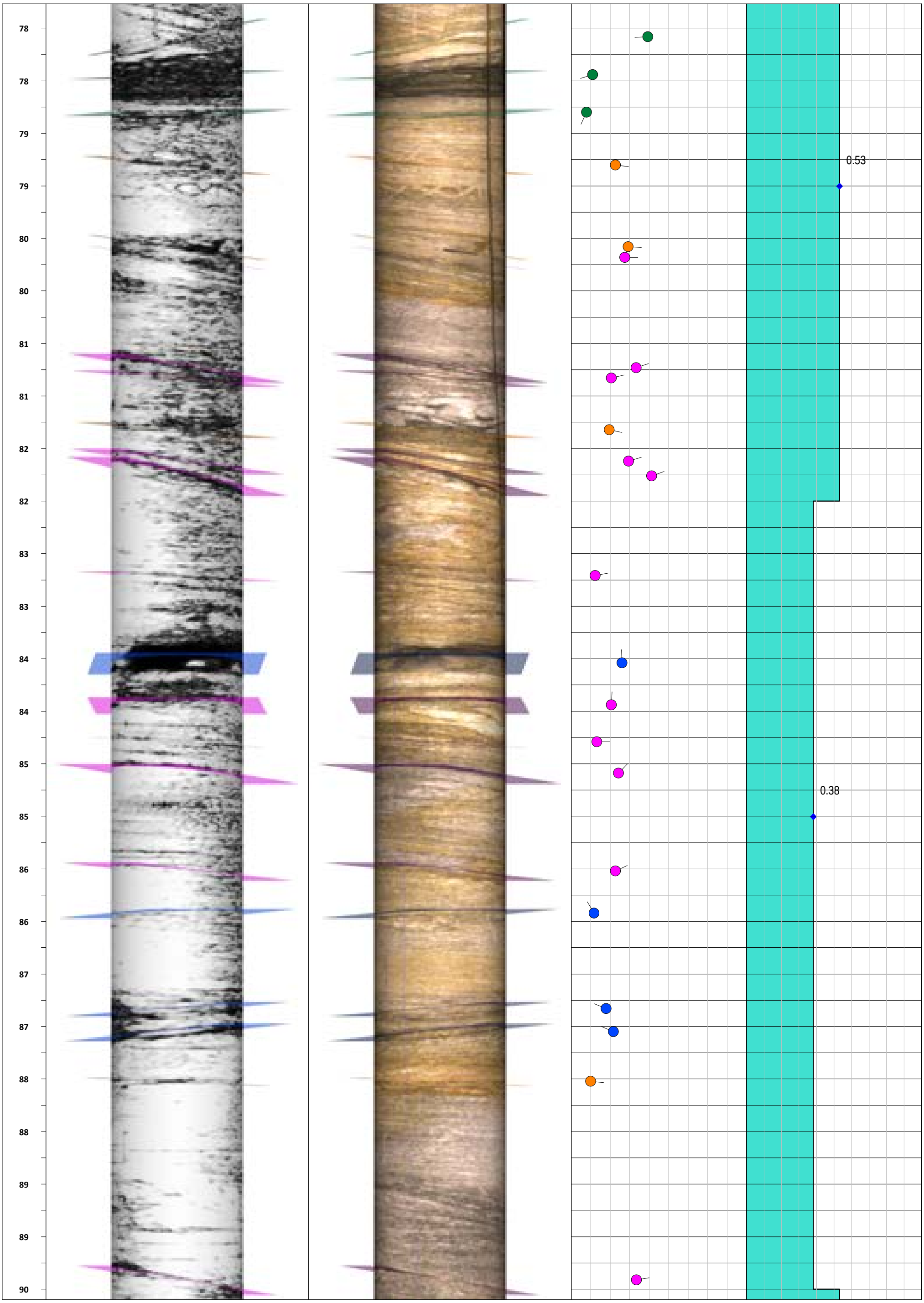
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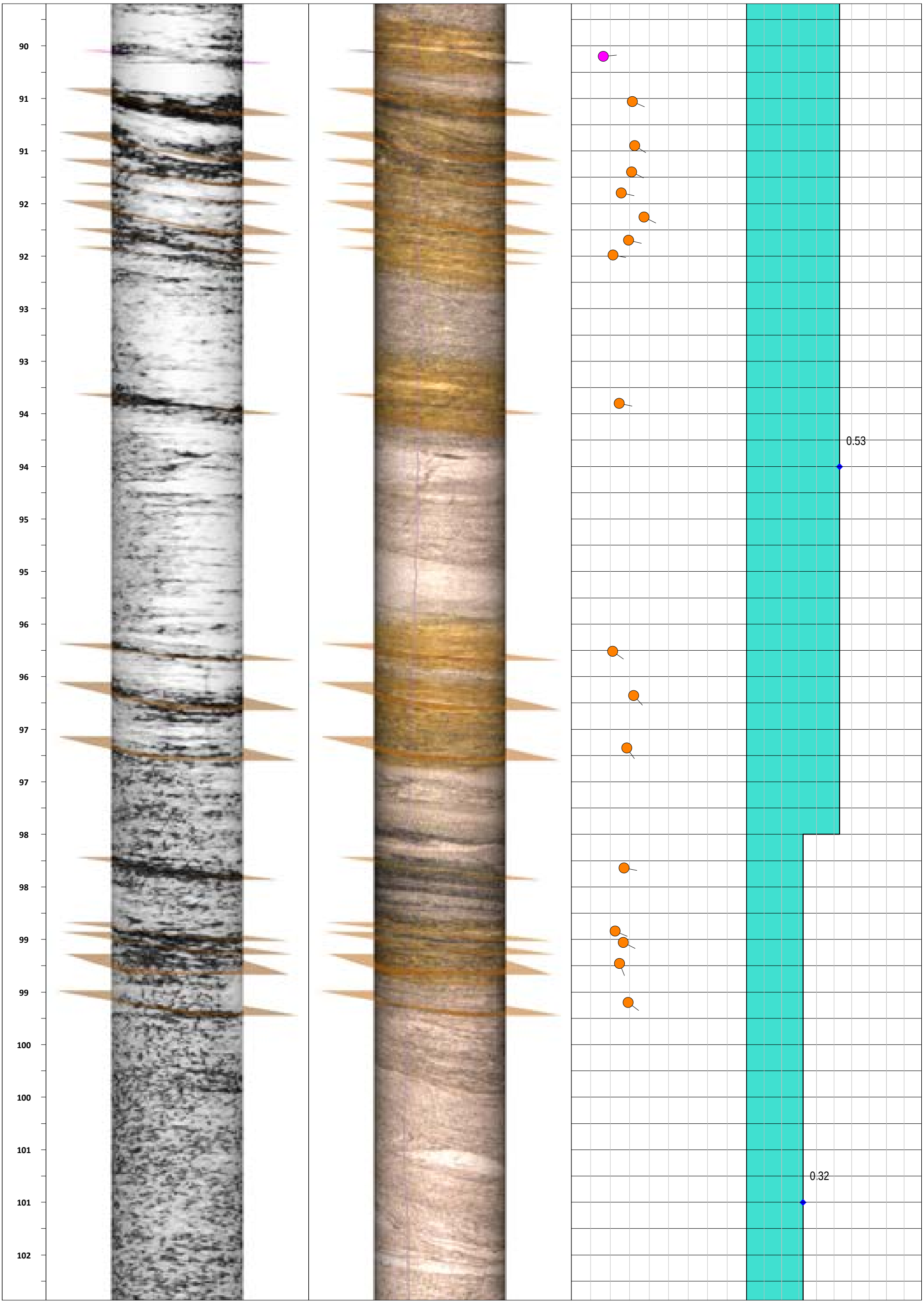
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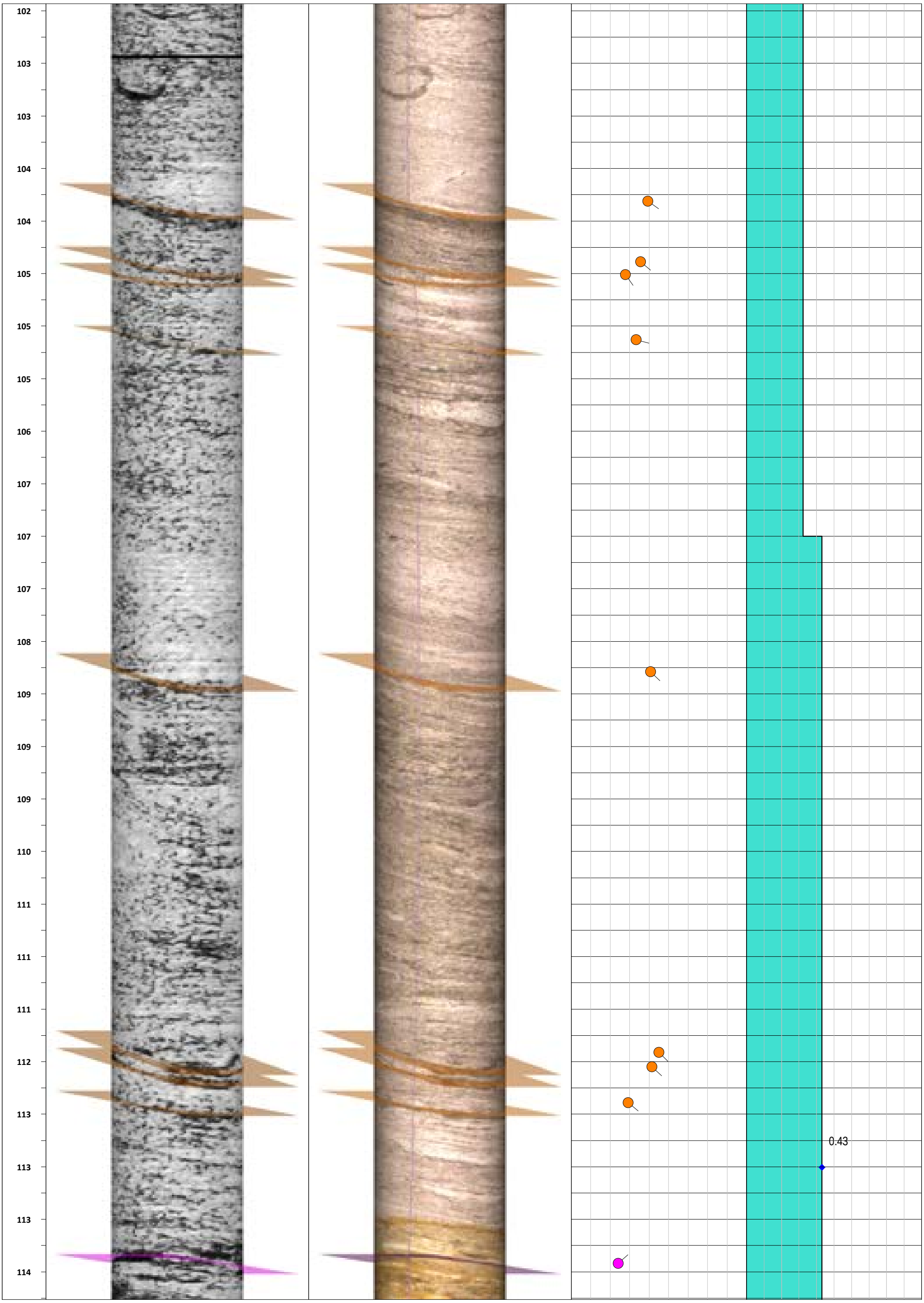
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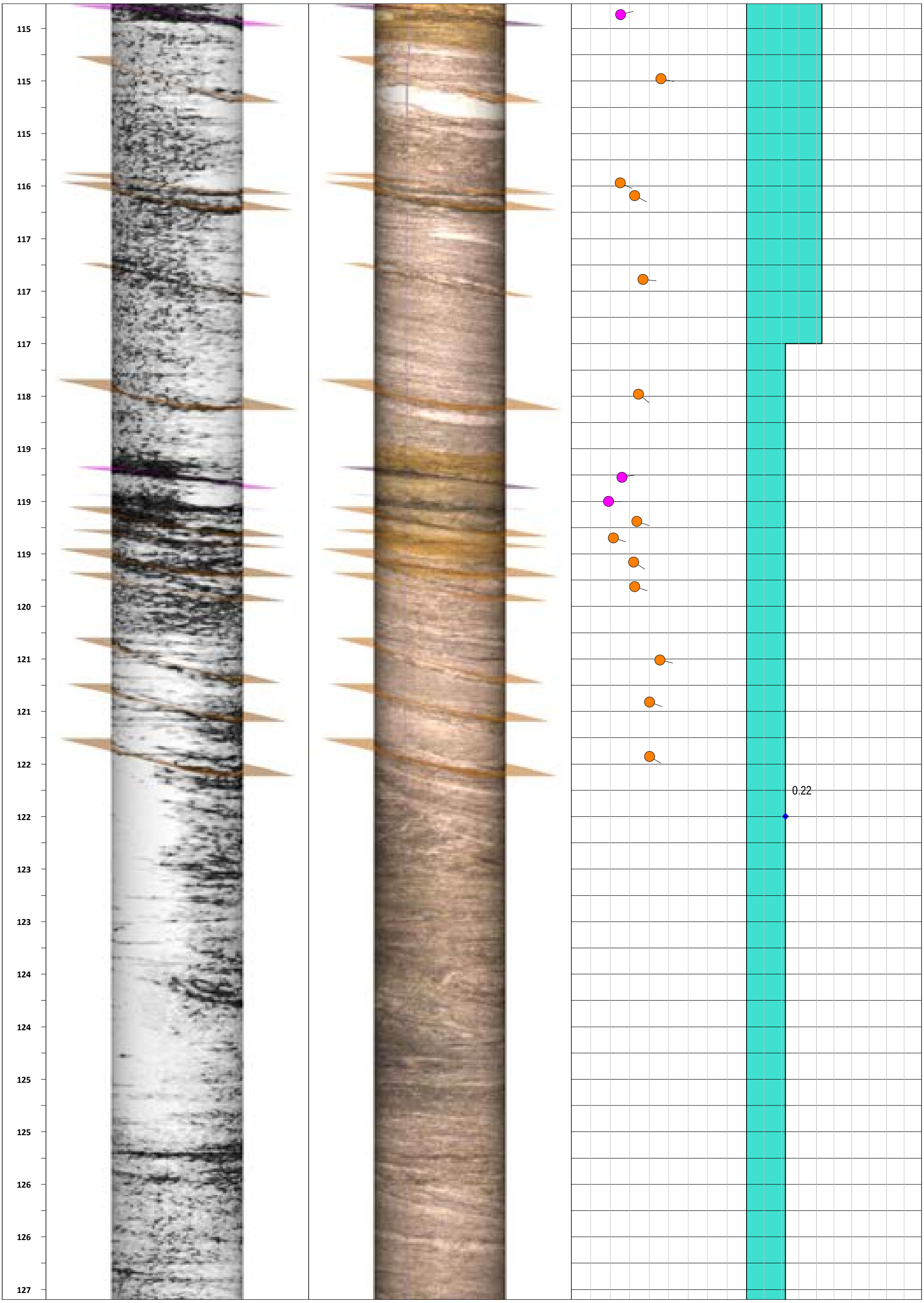
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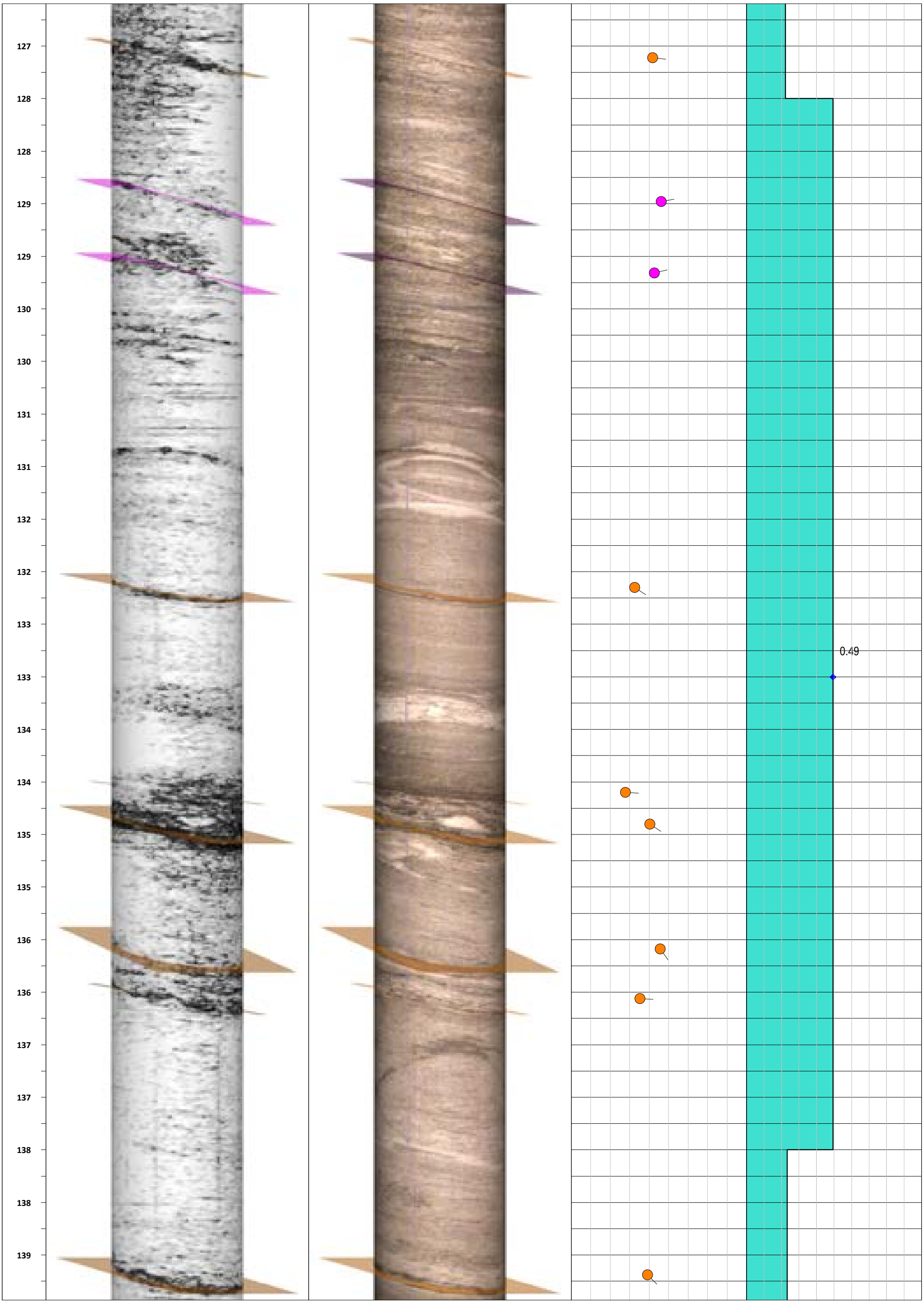
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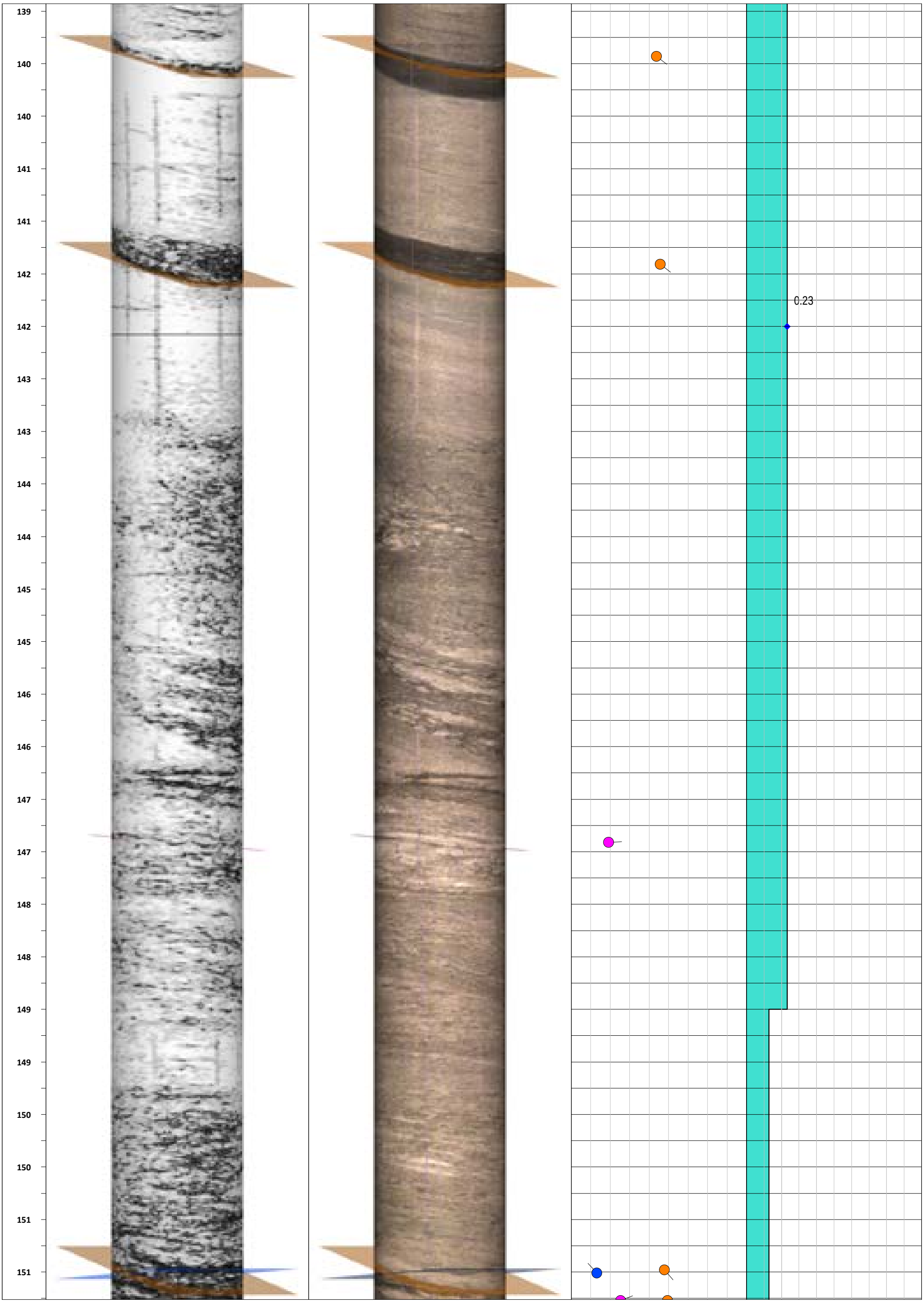
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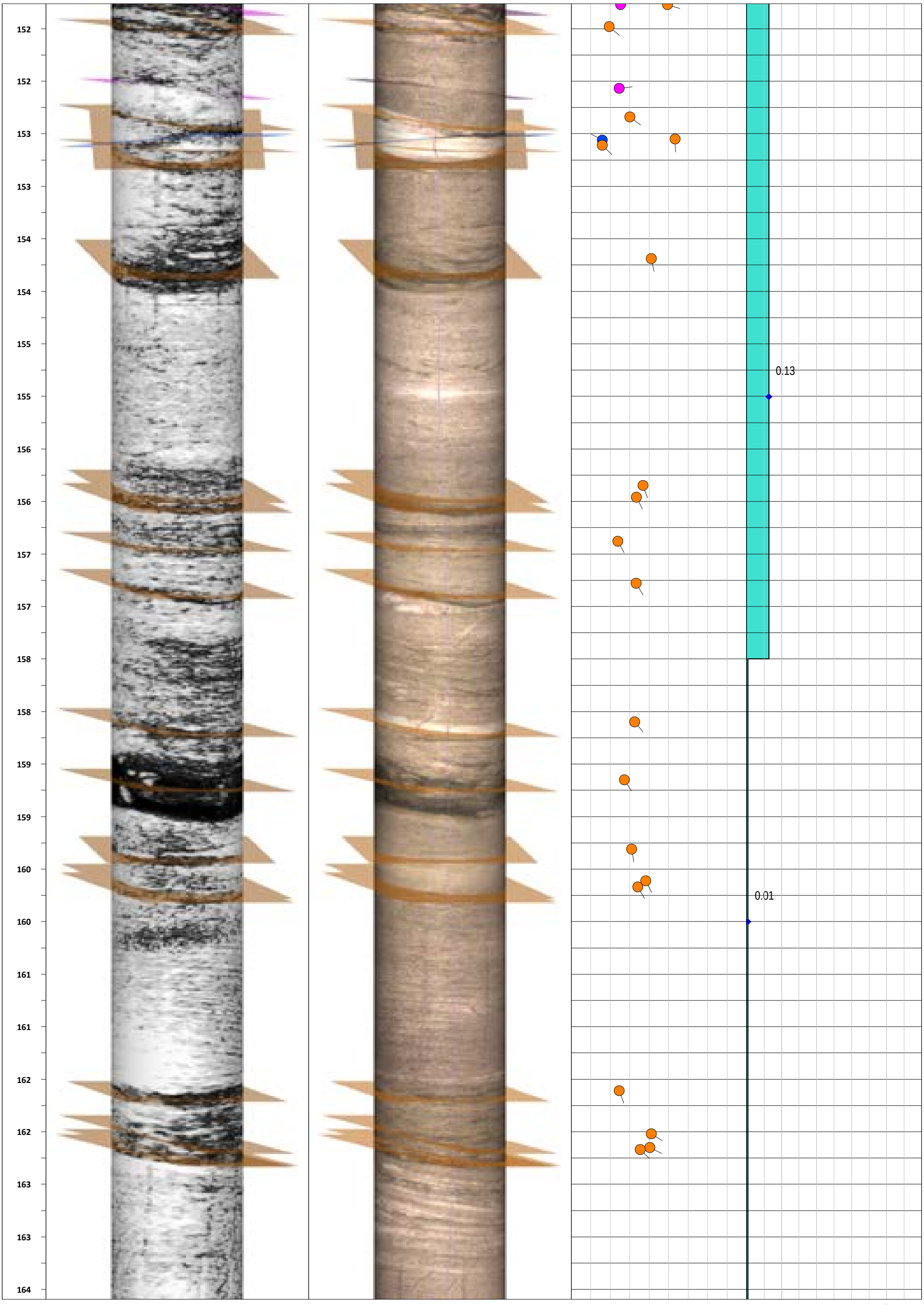
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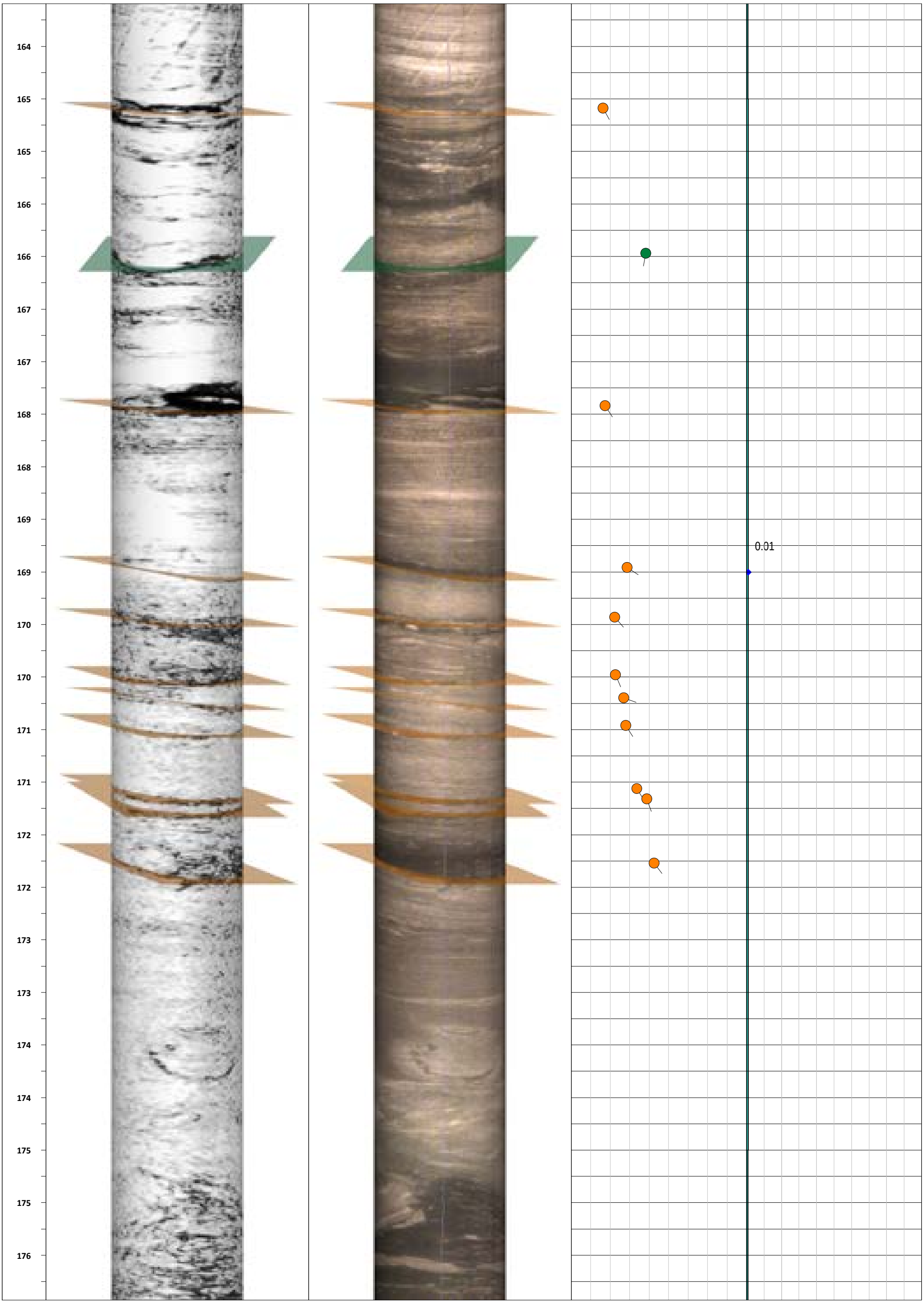
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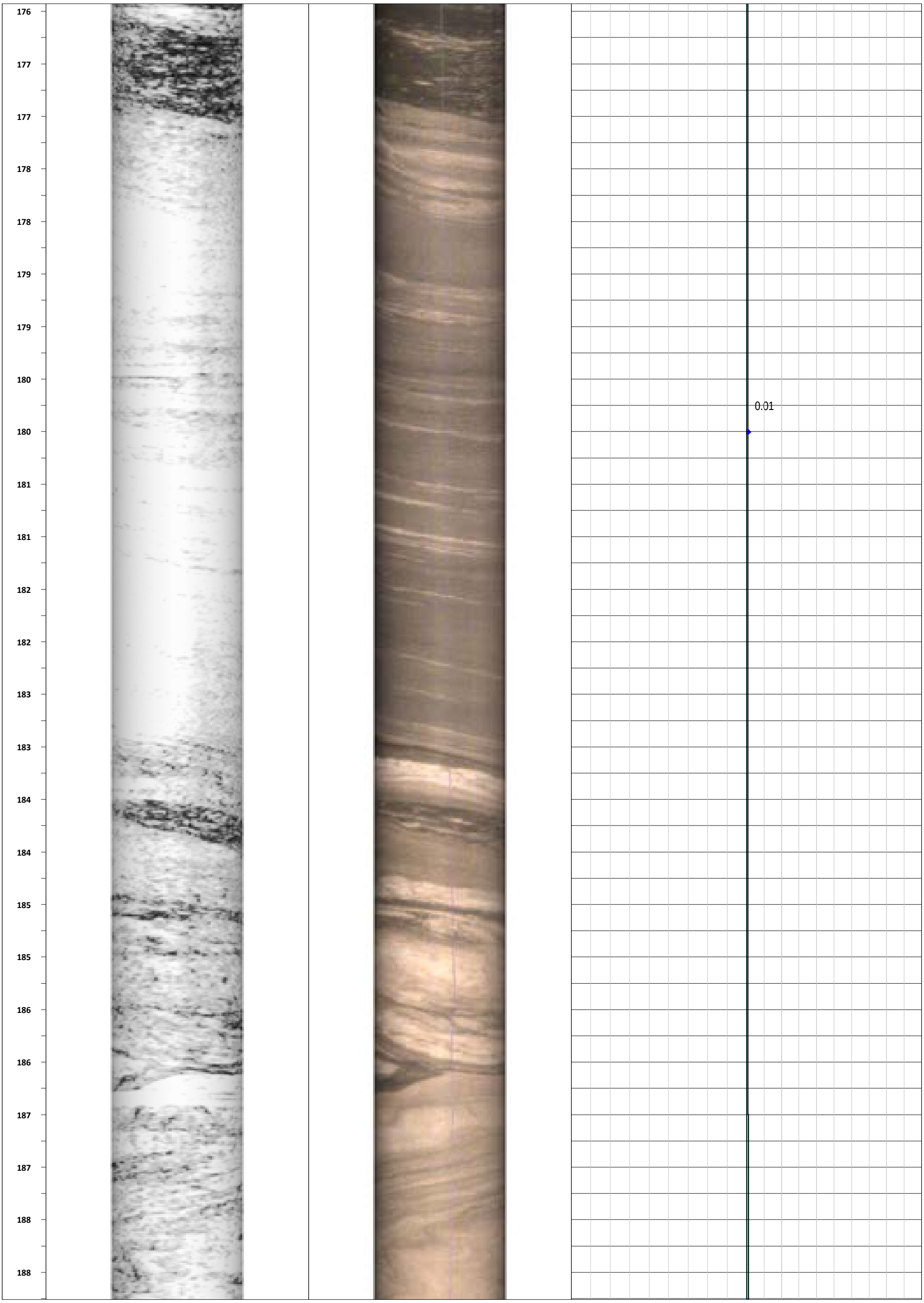
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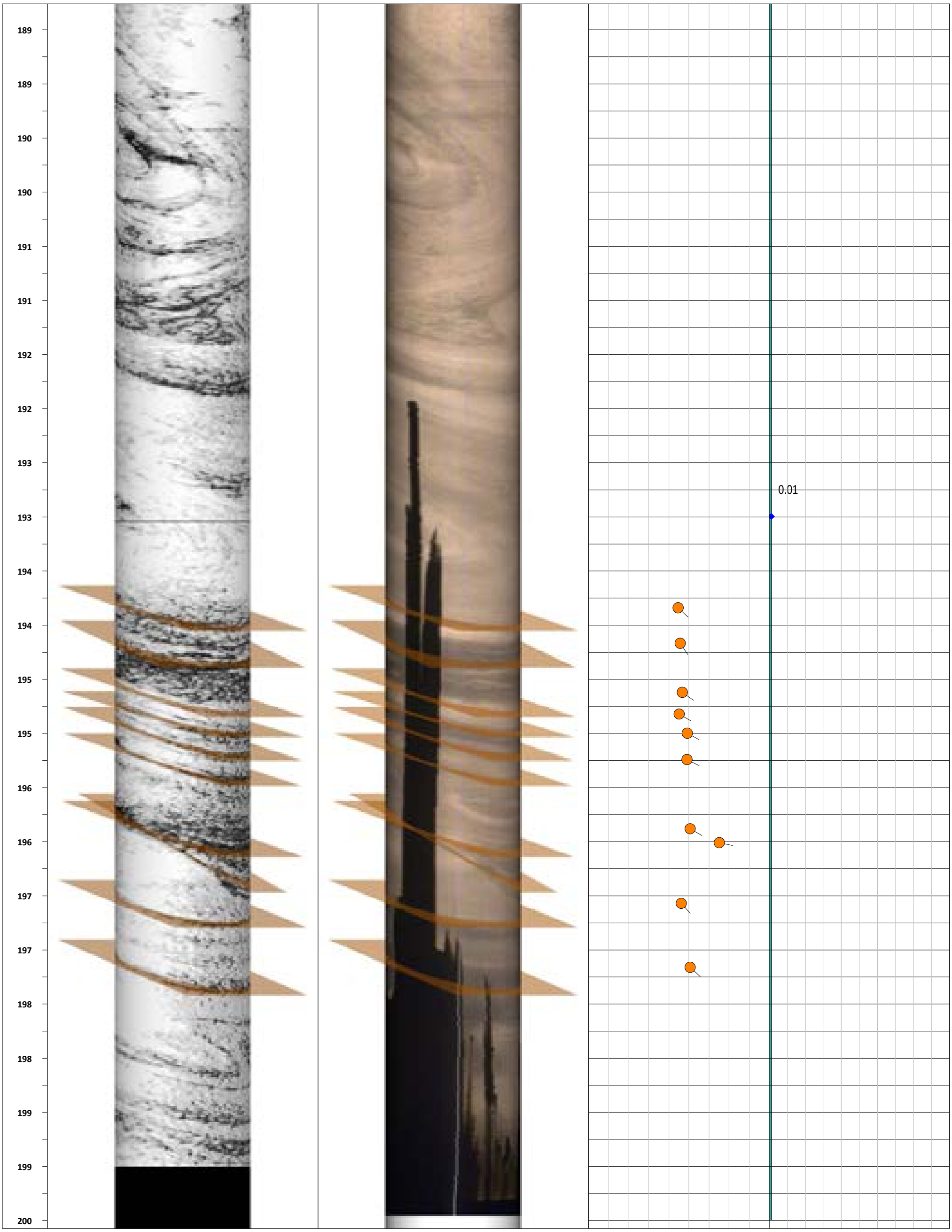
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Attachment 3

Trend Test Graphs

Appendix IV Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 1:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	**YGWA-20S (bg)**	**-0.0005785**	**-104**	**-81**	**Yes**	**20**	**50**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	**YGWC-38**	**-0.0007794**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-18I (bg)**	**-0.0004282**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-39 (bg)**	**0.001331**	**86**	**58**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWC-42**	**0.007174**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-47 (bg)**	**-0.0004228**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-30I (bg)**	**-0.009773**	**-86**	**-81**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3D (bg)**	**0.000976**	**99**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3I (bg)**	**0.001062**	**88**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWA-17S (bg)**	**0.0007074**	**88**	**74**	**Yes**	**19**	**68.42**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWC-38**	**-0.05831**	**-94**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV Trend Tests - All Results

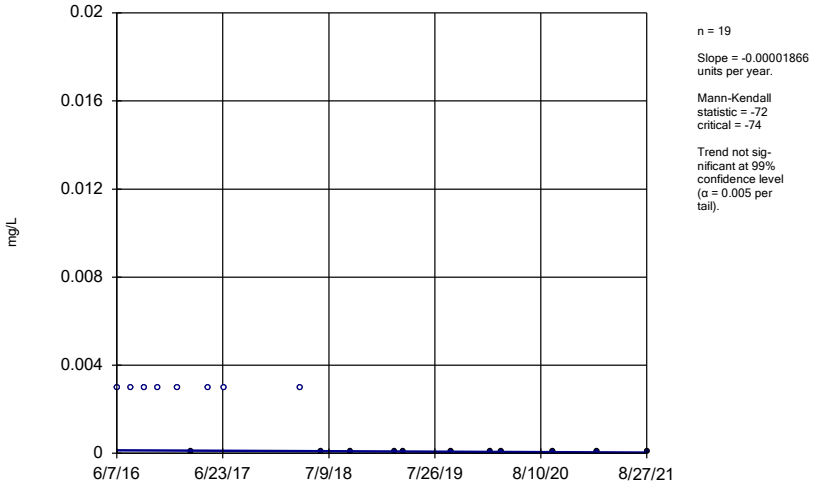
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 1:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	YGWA-17S (bg)	-0.00001866	-72	-74	No	19	42.11	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-18I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-18S (bg)	-0.0006066	-62	-81	No	20	45	n/a	n/a	0.01	NP
Beryllium (mg/L)	**YGWA-20S (bg)**	**-0.0005785**	**-104**	**-81**	**Yes**	**20**	**50**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	YGWA-21I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-39 (bg)	0	-11	-58	No	16	93.75	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-40 (bg)	-0.00001614	-30	-58	No	16	12.5	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-4I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-5D (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-5I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	**YGWC-38**	**-0.0007794**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	YGWA-47 (bg)	0	-16	-43	No	13	69.23	n/a	n/a	0.01	NP
Beryllium (mg/L)	GWA-2 (bg)	0	0	191	No	36	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-14S (bg)	-0.000002446	-33	-68	No	18	11.11	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-1D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-1I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-2I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-30I (bg)	0	-15	-68	No	18	88.89	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-3D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-3I (bg)	0	-11	-68	No	18	94.44	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-17S (bg)	0	-3	-74	No	19	89.47	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-18I (bg)**	**-0.0004282**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	YGWA-18S (bg)	-0.0002108	-41	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-20S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-21I (bg)	0.00016	39	81	No	20	5	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-39 (bg)**	**0.001331**	**86**	**58**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	YGWA-40 (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-4I (bg)	-0.000182	-32	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-5D (bg)	0.0002654	63	81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-5I (bg)	0	-2	-81	No	20	10	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWC-42**	**0.007174**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-47 (bg)**	**-0.0004228**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	GWA-2 (bg)	-0.0004067	-22	-53	No	15	40	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-14S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-1D (bg)	-0.0006682	-41	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-1I (bg)	0	-31	-81	No	20	15	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-2I (bg)	-0.0002795	-42	-81	No	20	10	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-30I (bg)**	**-0.009773**	**-86**	**-81**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3D (bg)**	**0.000976**	**99**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3I (bg)**	**0.001062**	**88**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWA-17S (bg)**	**0.0007074**	**88**	**74**	**Yes**	**19**	**68.42**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-18I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-18S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-20S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-21I (bg)	0	35	81	No	20	90	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-39 (bg)	0	1	58	No	16	93.75	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-40 (bg)	-0.0006615	-31	-58	No	16	37.5	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-4I (bg)	0	1	81	No	20	90	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-5D (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-5I (bg)	0	17	81	No	20	95	n/a	n/a	0.01	NP
Selenium (mg/L)	**YGWC-38**	**-0.05831**	**-94**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-47 (bg)	0	15	34	No	11	81.82	n/a	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	191	No	36	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-14S (bg)	0	55	68	No	18	72.22	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-1D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-1I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-2I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-30I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-3D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-3I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	PZ-37	0.005682	5	38	No	12	0	n/a	n/a	0.01	NP

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

Sen's Slope Estimator

YGWA-17S (bg)



n = 19

Slope = -0.00001866 units per year.

Mann-Kendall statistic = -72
critical = -74

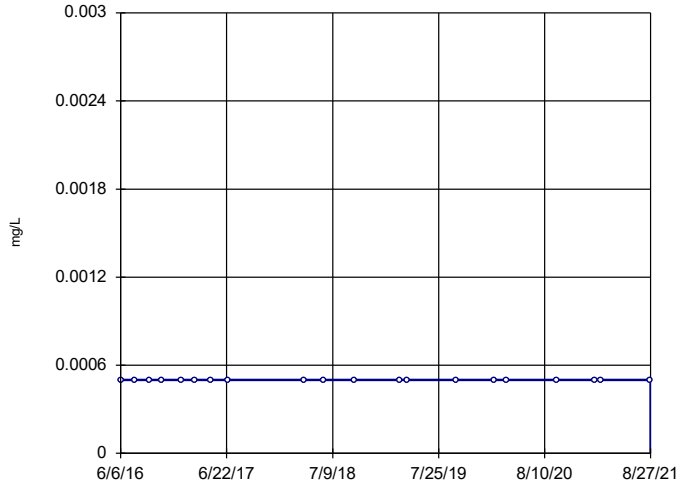
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-18I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

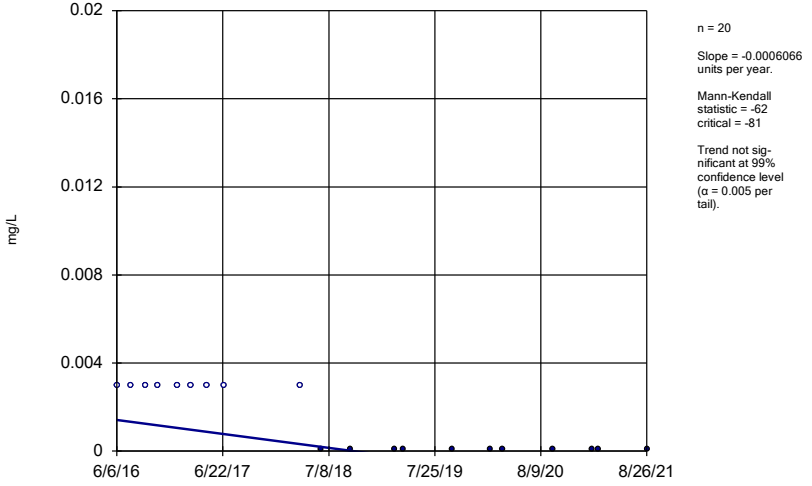
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-18S (bg)



n = 20

Slope = -0.0006066 units per year.

Mann-Kendall statistic = -62
critical = -81

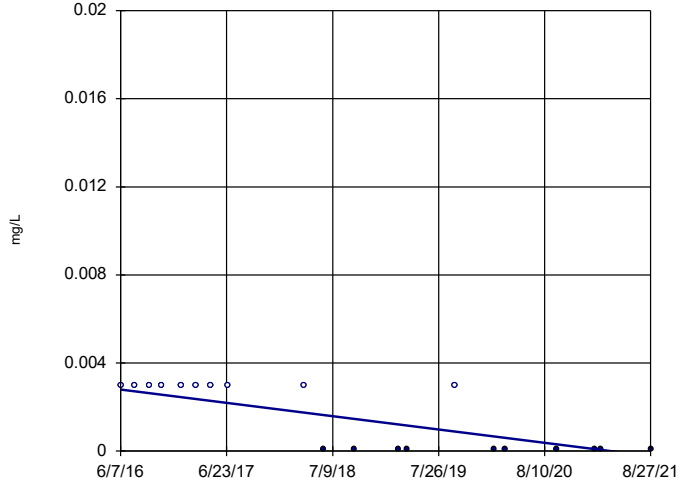
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-20S (bg)



n = 20

Slope = -0.0005785 units per year.

Mann-Kendall statistic = -104
critical = -81

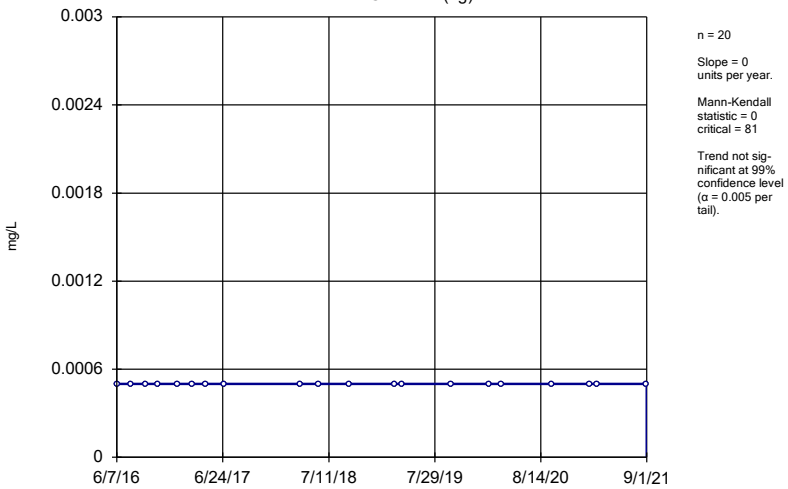
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-21I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

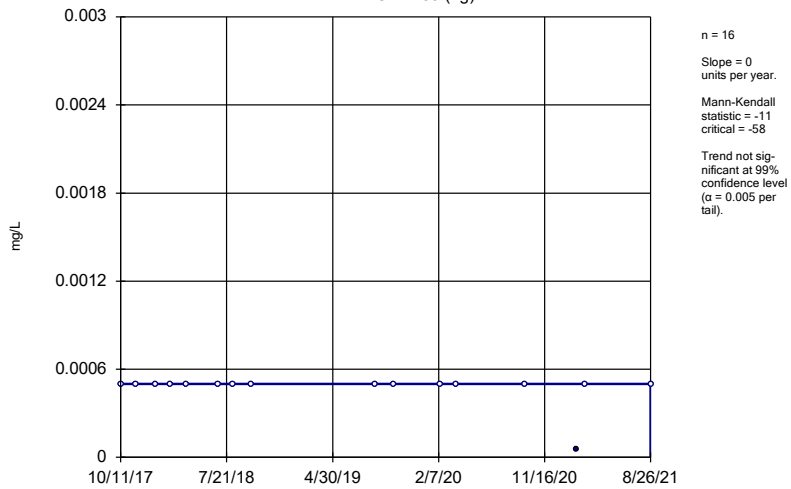
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-39 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -58

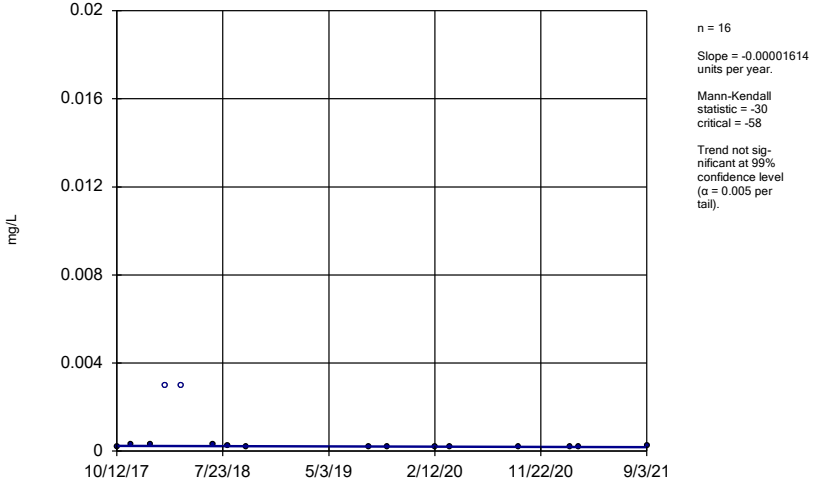
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-40 (bg)



n = 16

Slope = -0.00001614 units per year.

Mann-Kendall statistic = -30
critical = -58

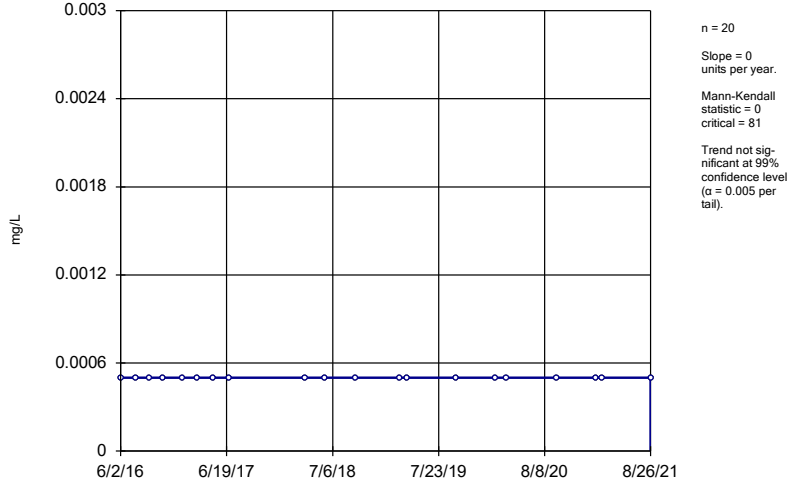
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-4I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

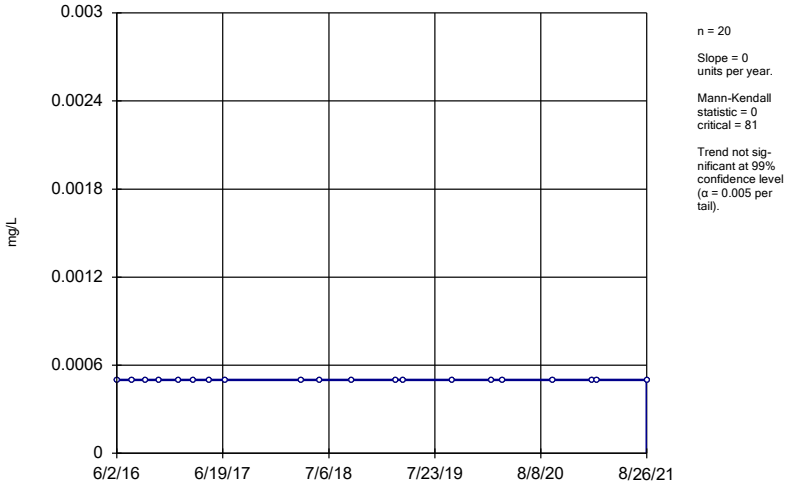
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-5D (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

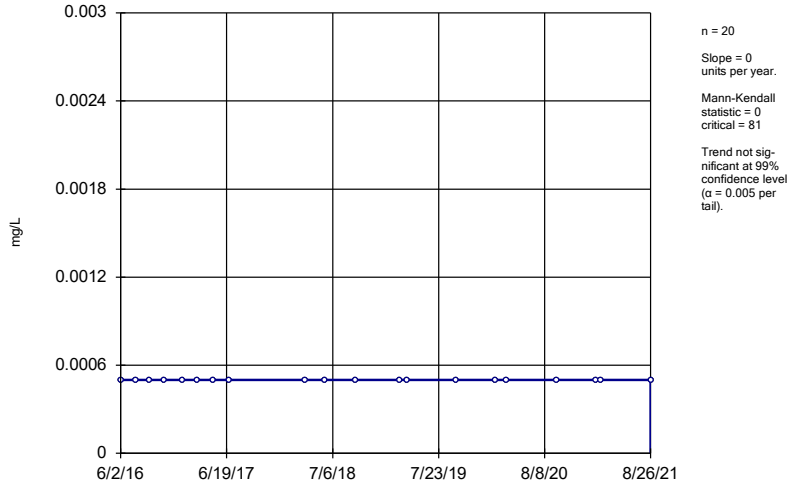
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-5I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

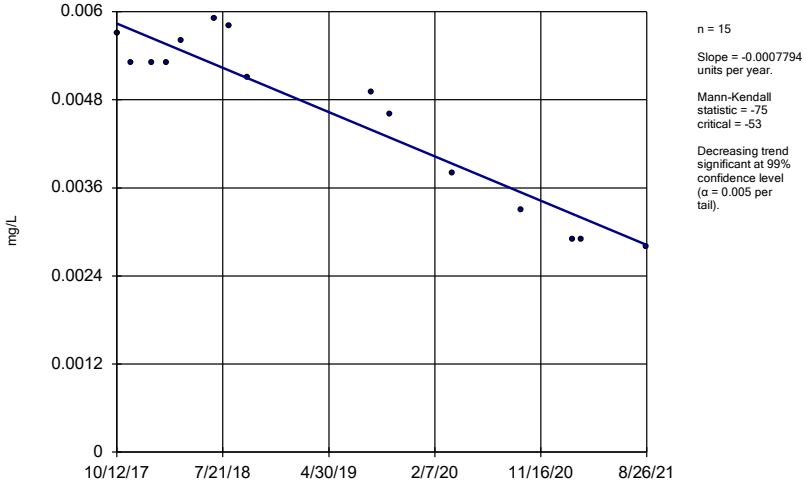
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 15

Slope = -0.0007794 units per year.

Mann-Kendall statistic = -75
critical = -53

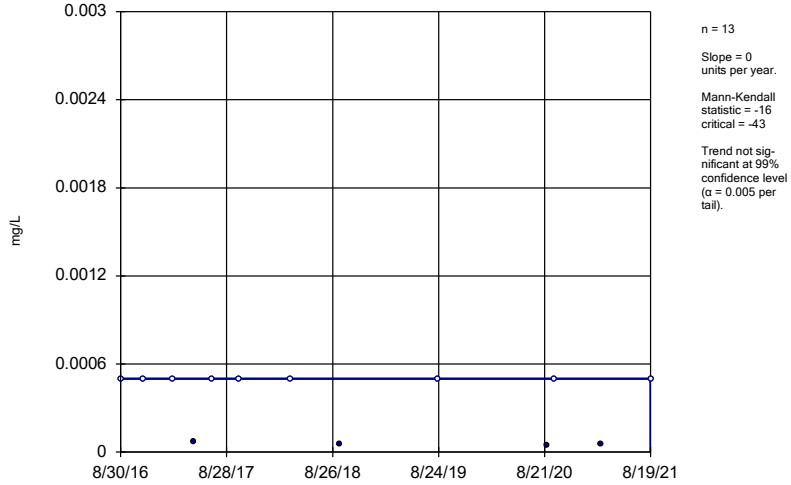
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = 0 units per year.

Mann-Kendall statistic = -16
critical = -43

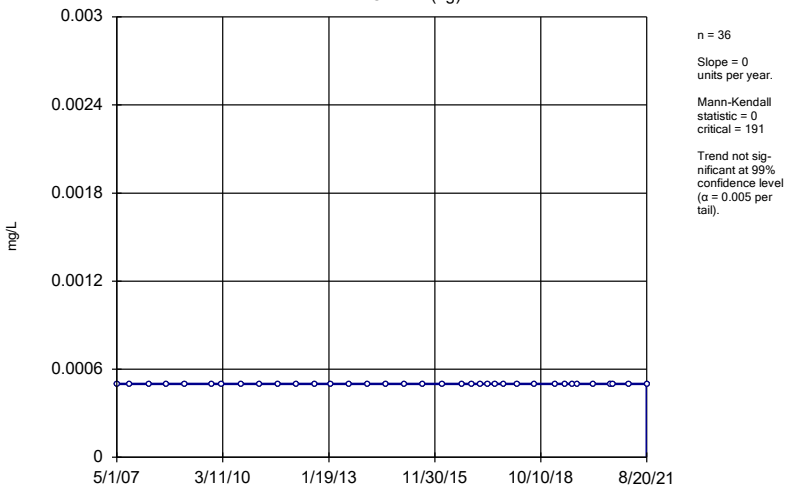
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

GWA-2 (bg)



n = 36

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 191

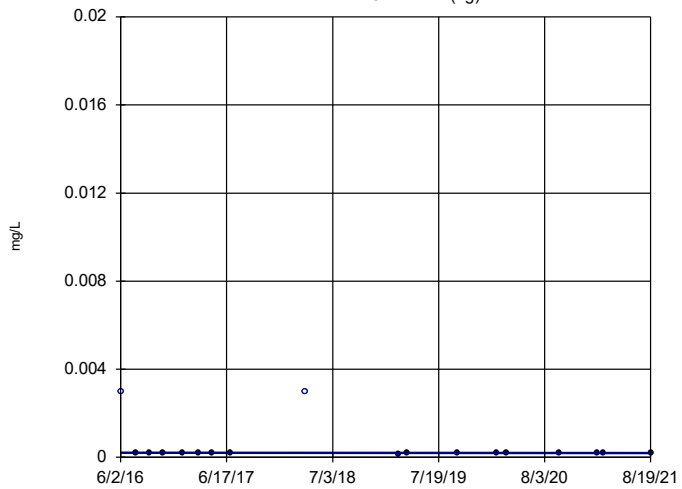
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-14S (bg)



n = 18

Slope = -0.000002446 units per year.

Mann-Kendall statistic = -33
critical = -68

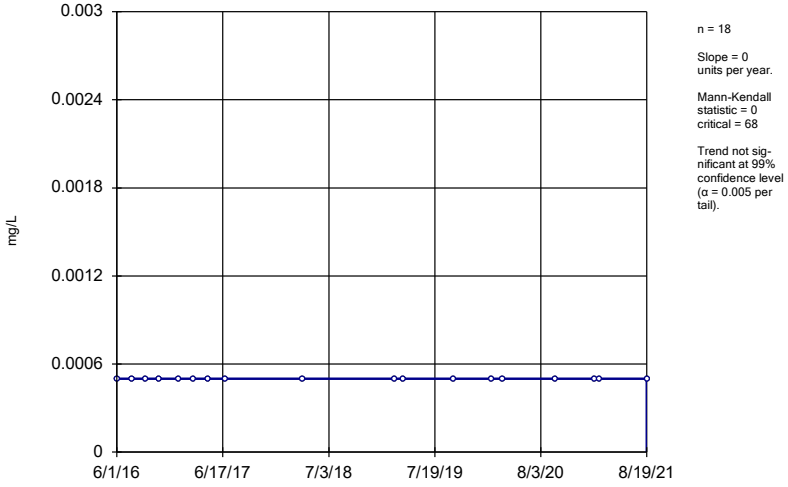
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-1D (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

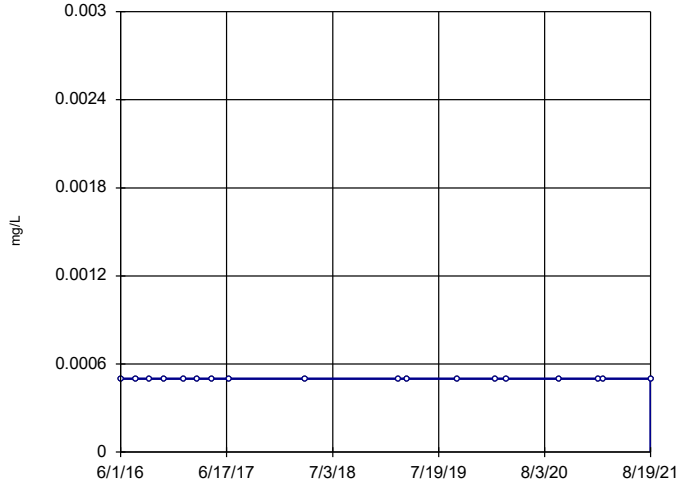
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-1I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

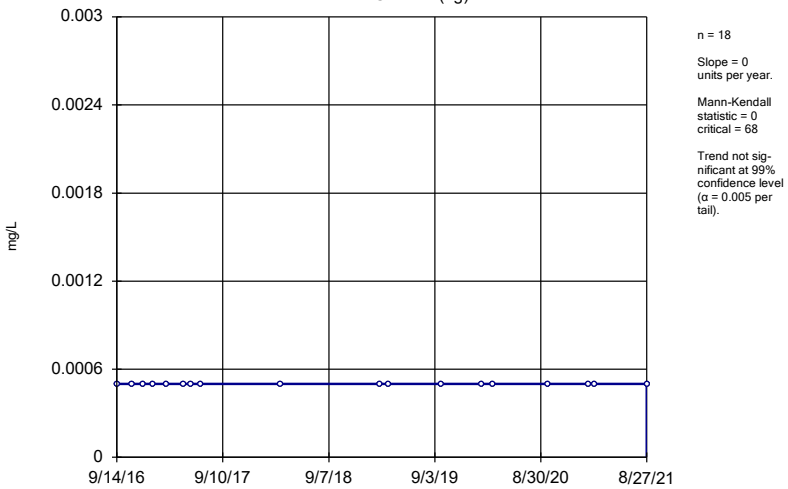
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-2I (bg)

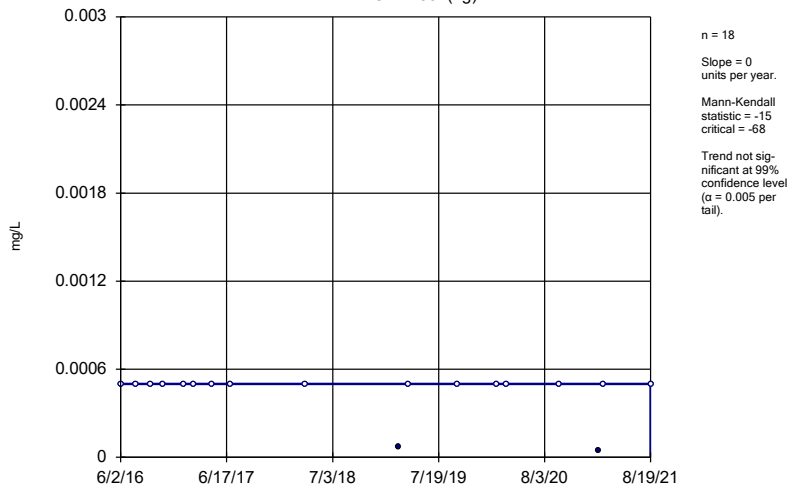


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-30I (bg)

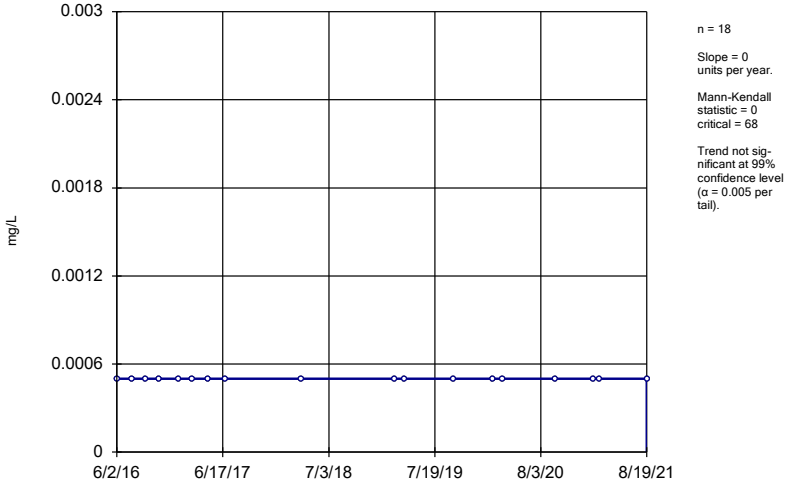


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-3D (bg)

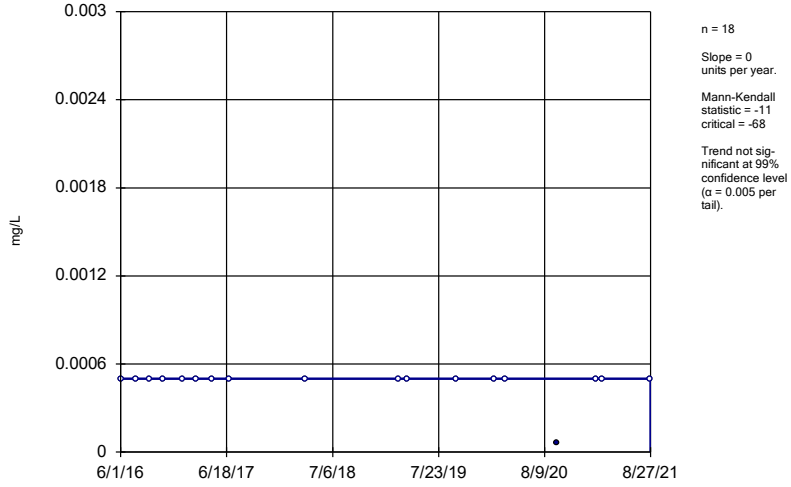


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-3I (bg)

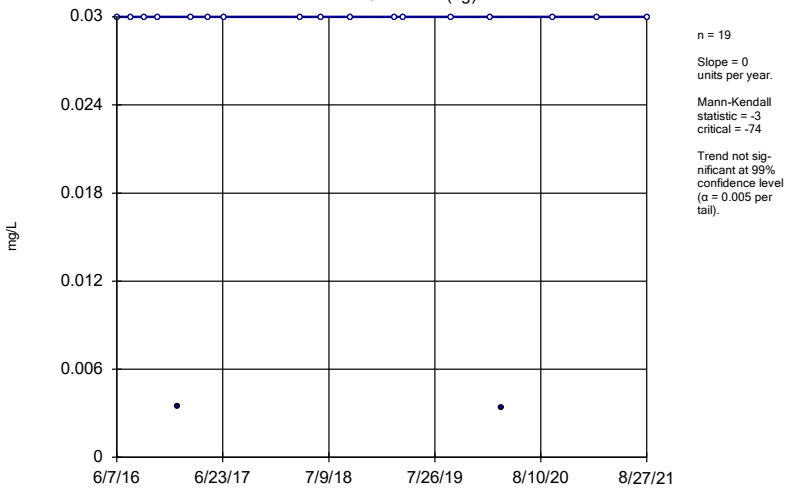


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-17S (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = -3
critical = -74

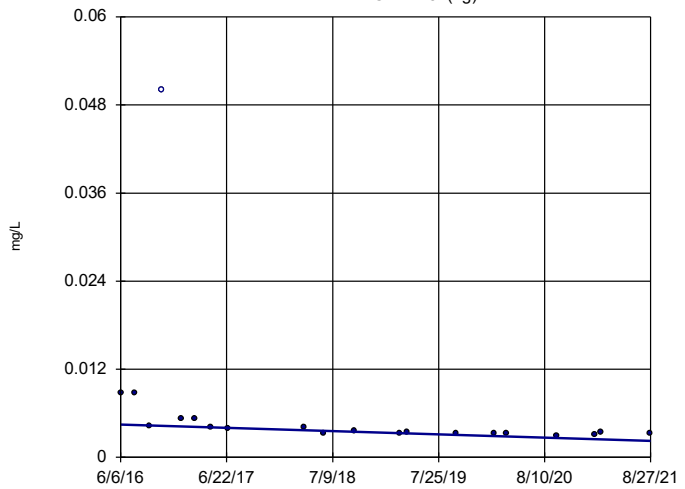
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-18I (bg)



n = 20

Slope = -0.0004282
units per year.

Mann-Kendall
statistic = -133
critical = -81

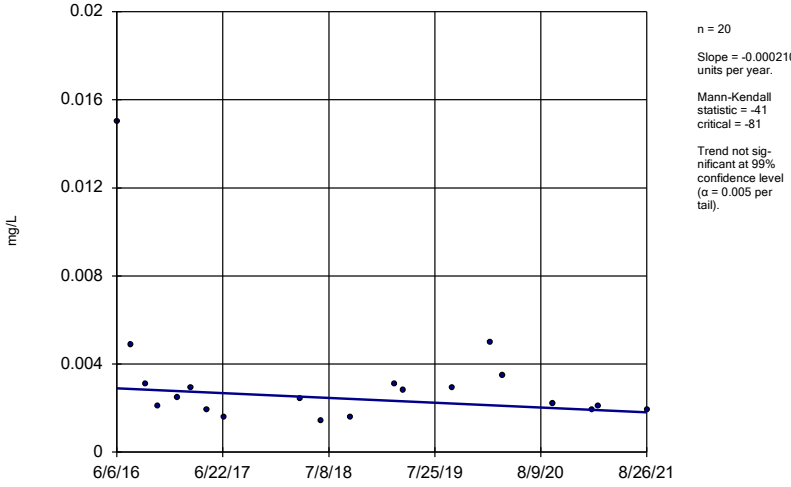
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 20

Slope = -0.0002108
units per year.

Mann-Kendall
statistic = -41
critical = -81

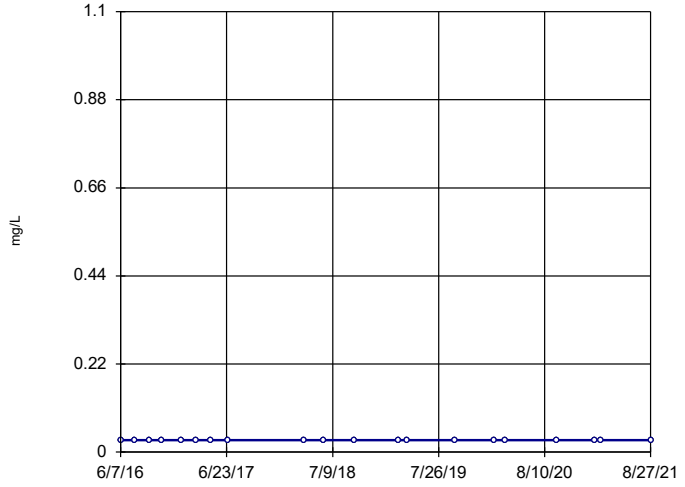
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-20S (bg)



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 81

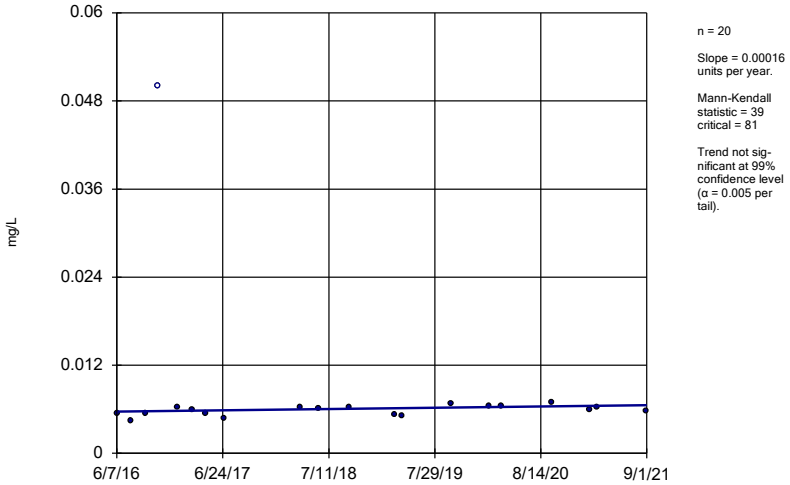
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-21I (bg)



n = 20

Slope = 0.00016 units per year.

Mann-Kendall statistic = 39
critical = 81

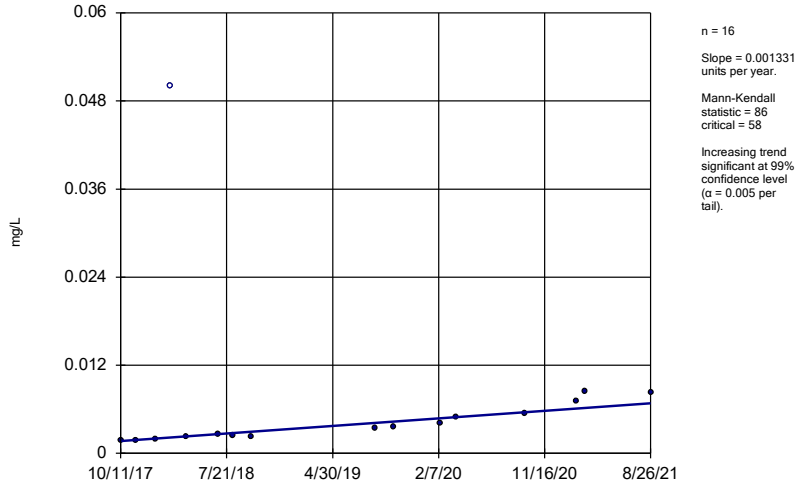
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-39 (bg)



n = 16

Slope = 0.001331 units per year.

Mann-Kendall statistic = 86
critical = 58

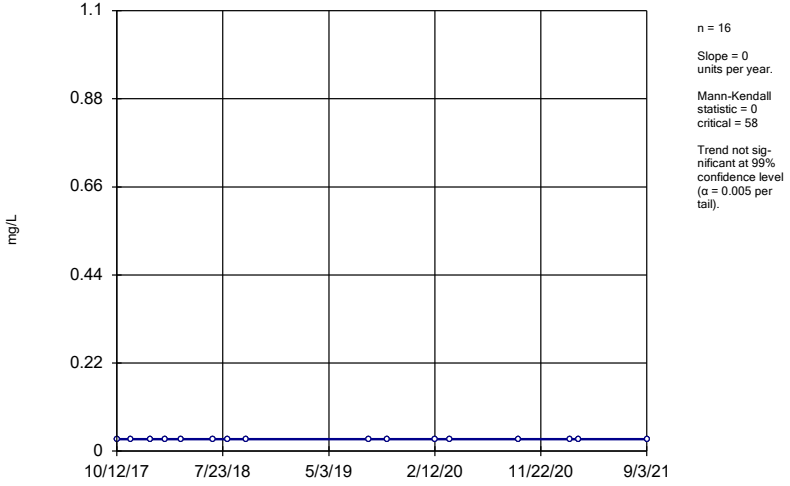
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-40 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 58

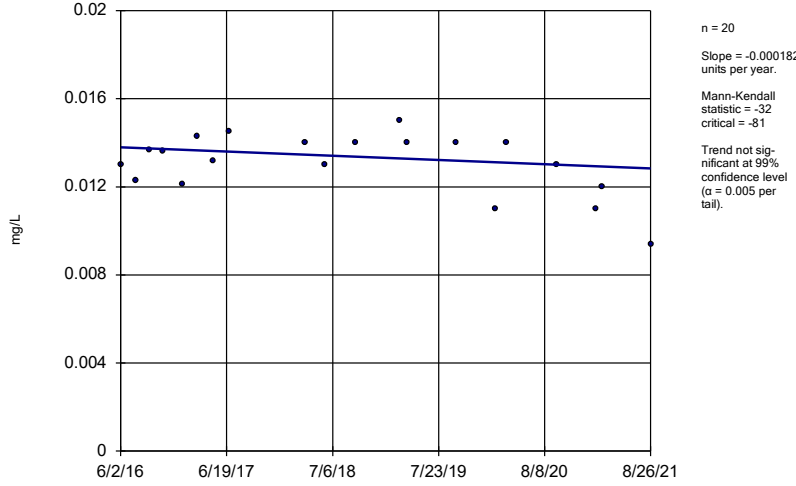
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 20

Slope = -0.000182 units per year.

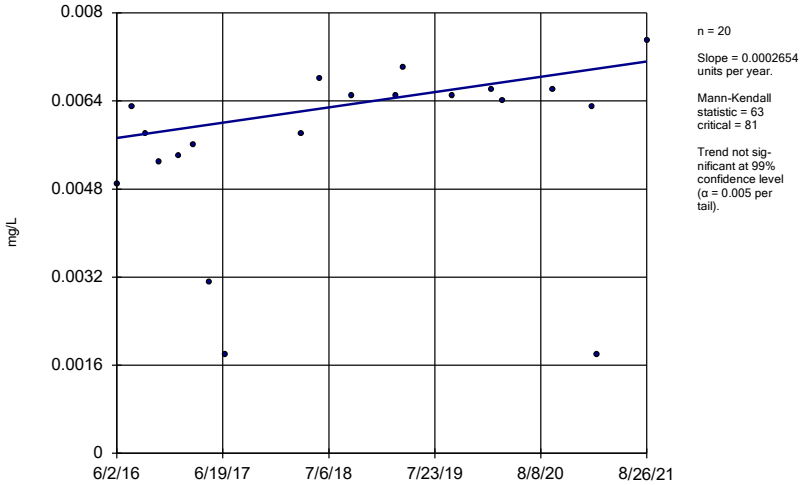
Mann-Kendall statistic = -32
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-5D (bg)



n = 20

Slope = 0.0002654 units per year.

Mann-Kendall statistic = 63
critical = 81

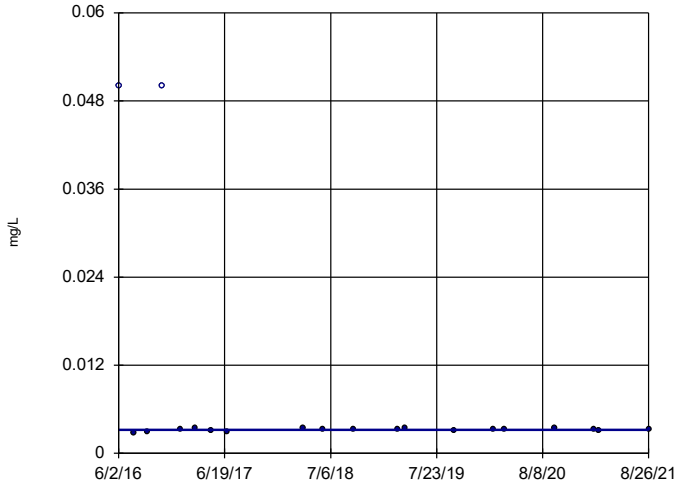
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 20

Slope = 0 units per year.

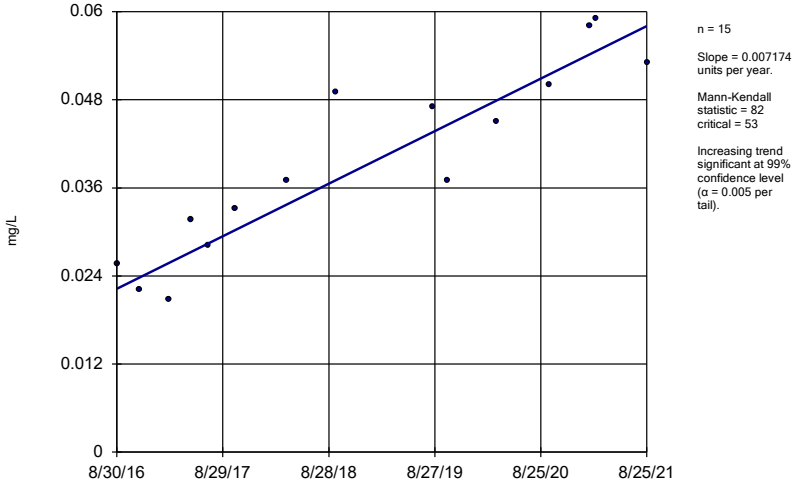
Mann-Kendall statistic = -2
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-42



n = 15

Slope = 0.007174 units per year.

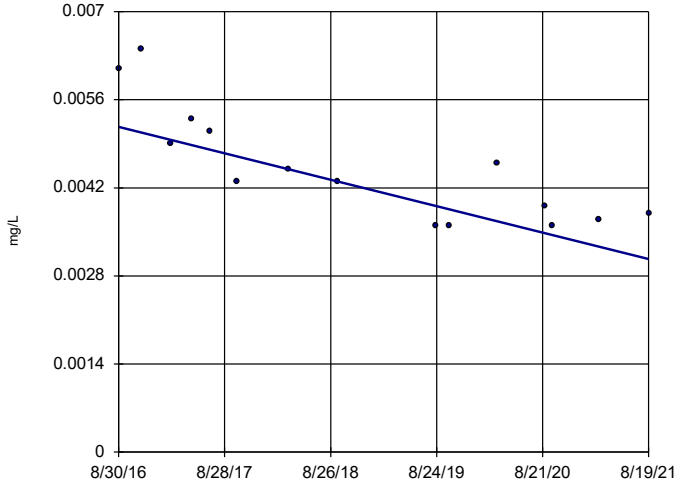
Mann-Kendall statistic = 82
critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-47 (bg)



n = 15

Slope = -0.0004228 units per year.

Mann-Kendall statistic = -65
critical = -53

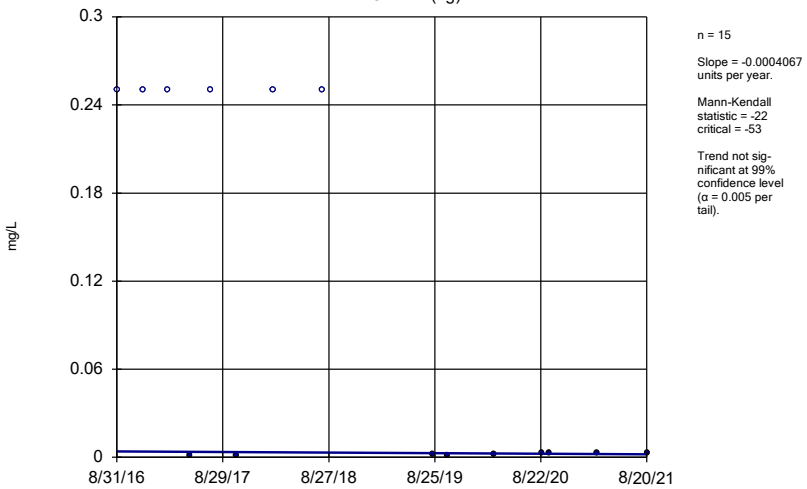
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = -0.0004067 units per year.

Mann-Kendall statistic = -22
critical = -53

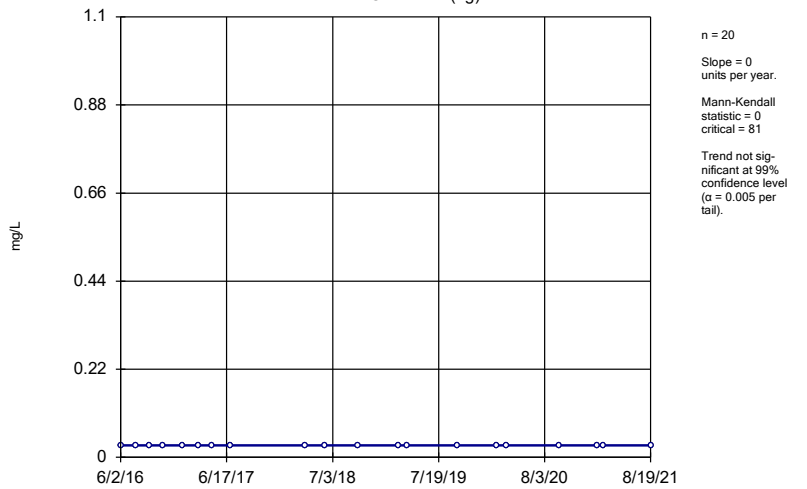
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-14S (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

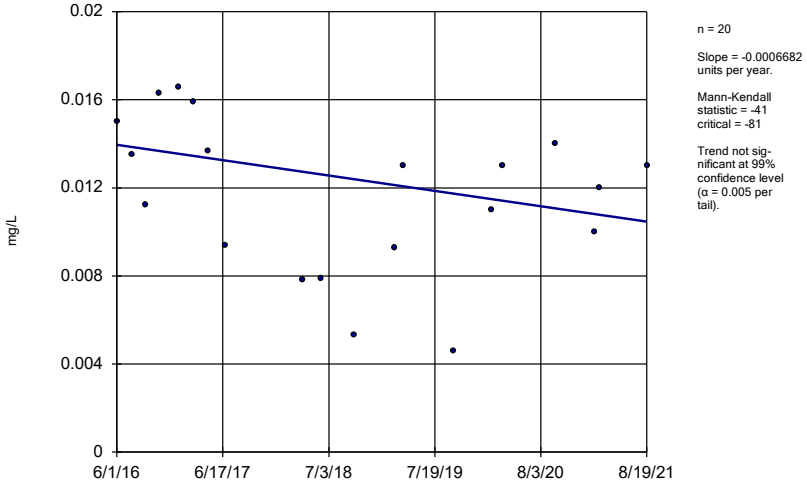
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 20

Slope = -0.0006682 units per year.

Mann-Kendall statistic = -41
critical = -81

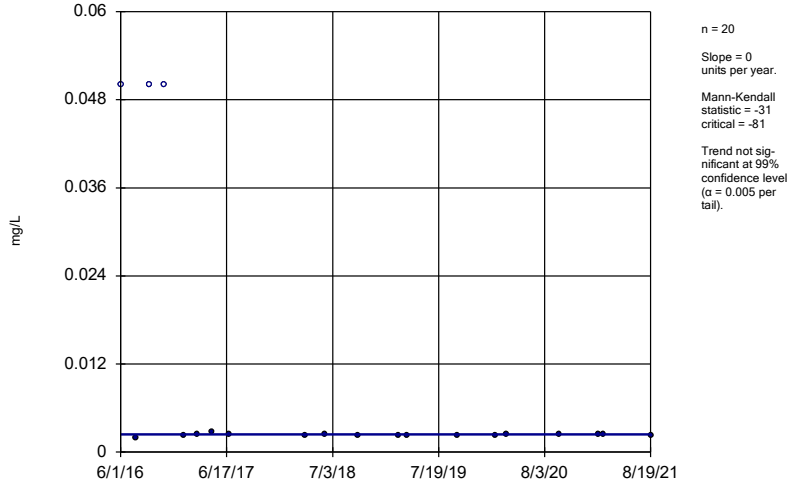
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-1I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -31
critical = -81

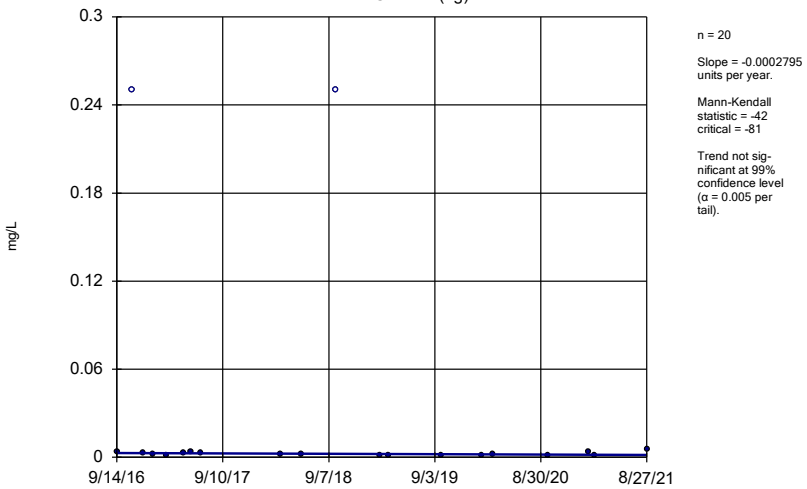
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-2I (bg)



n = 20

Slope = -0.0002795 units per year.

Mann-Kendall statistic = -42
critical = -81

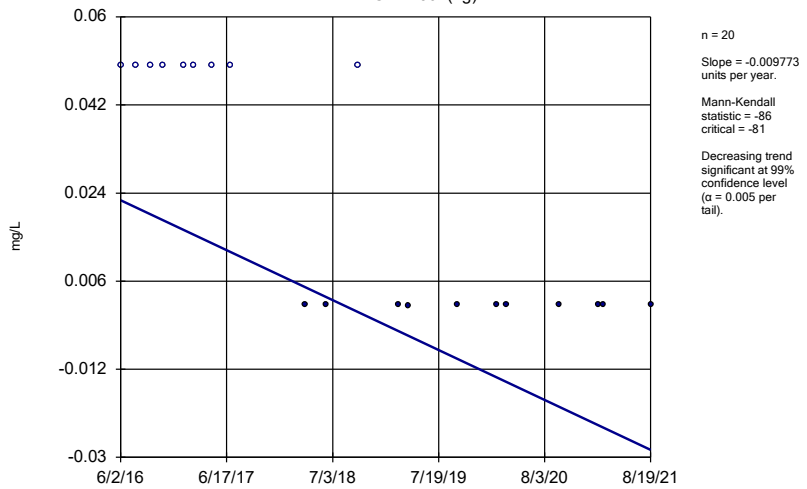
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-30I (bg)



n = 20

Slope = -0.009773 units per year.

Mann-Kendall statistic = -86
critical = -81

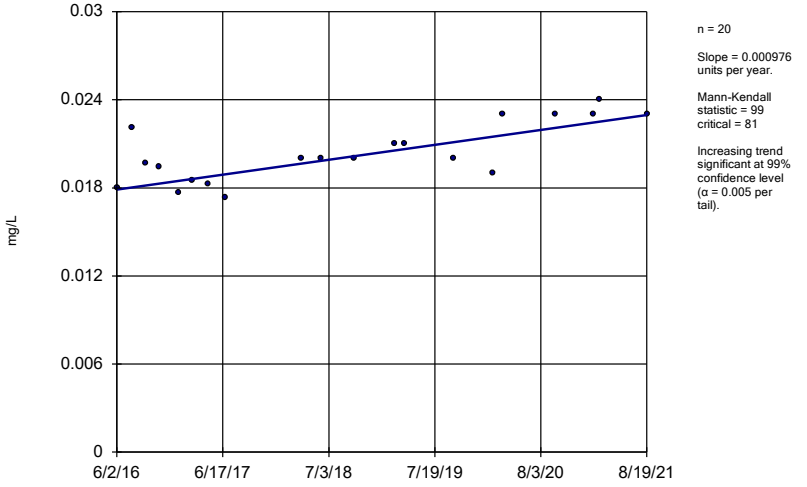
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 20

Slope = 0.000976 units per year.

Mann-Kendall statistic = 99
critical = 81

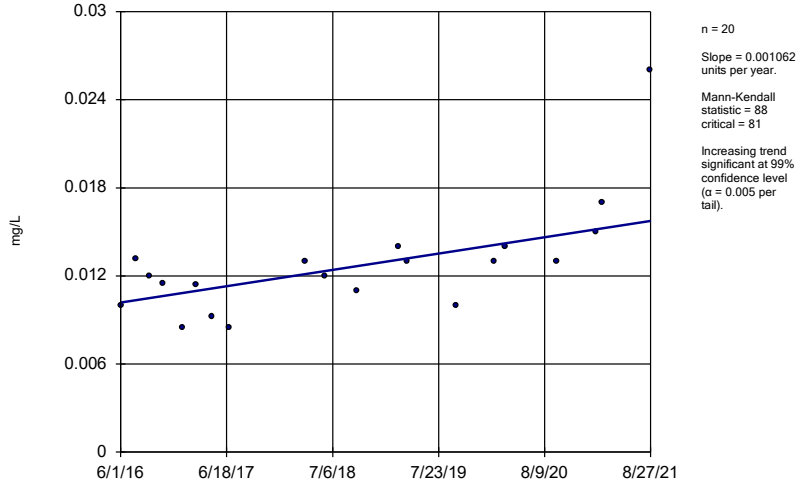
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 20

Slope = 0.001062 units per year.

Mann-Kendall statistic = 88
critical = 81

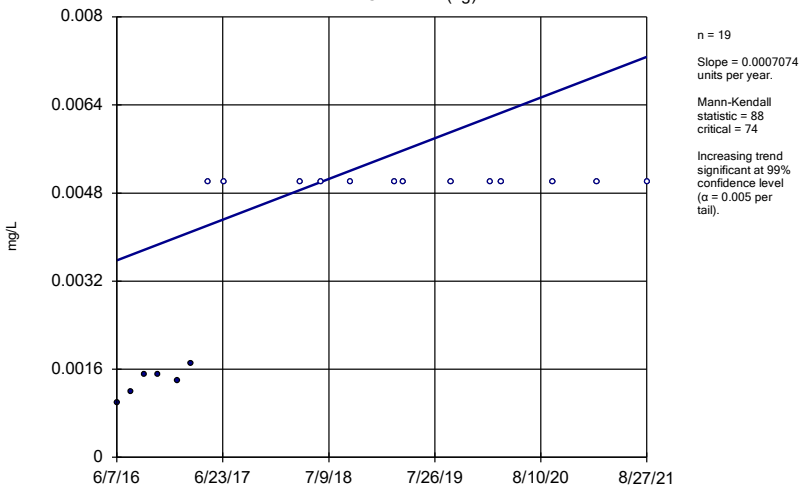
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-17S (bg)



n = 19

Slope = 0.0007074 units per year.

Mann-Kendall statistic = 88
critical = 74

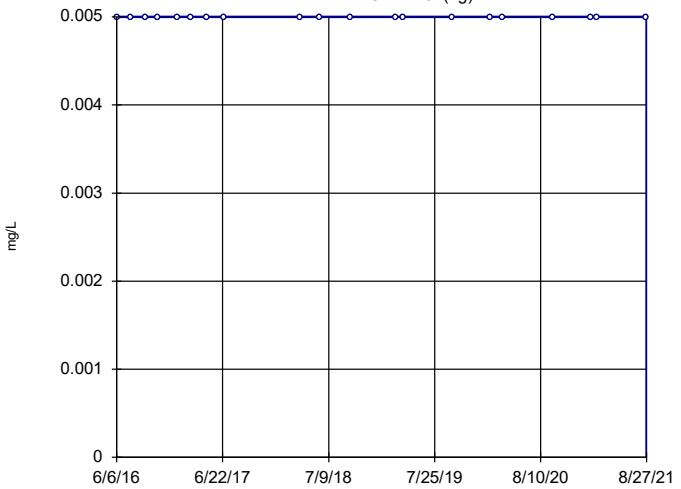
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-18I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

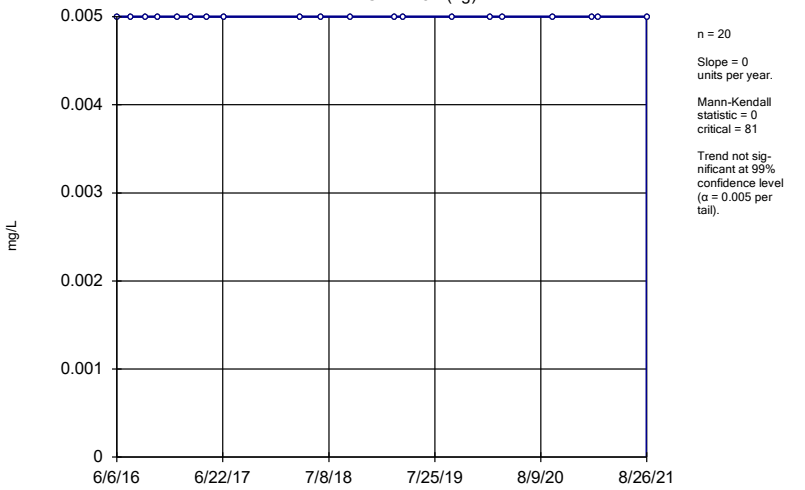
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-18S (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

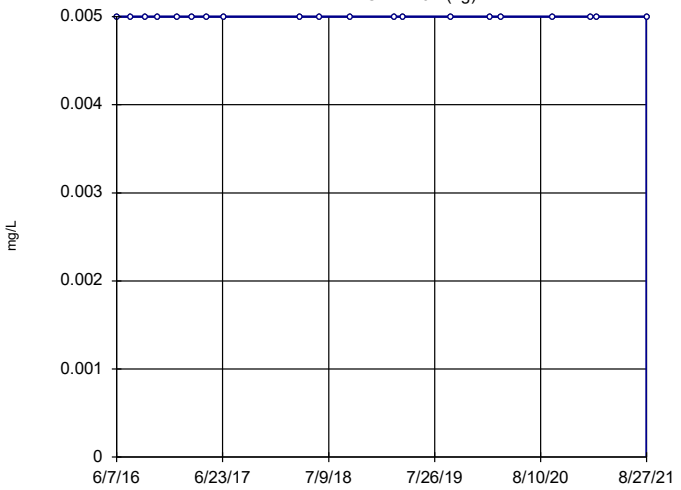
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-20S (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

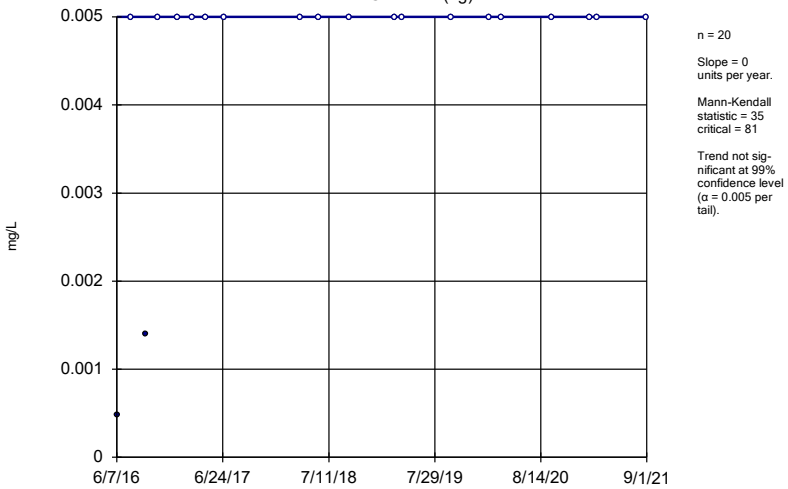
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-21I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 35
critical = 81

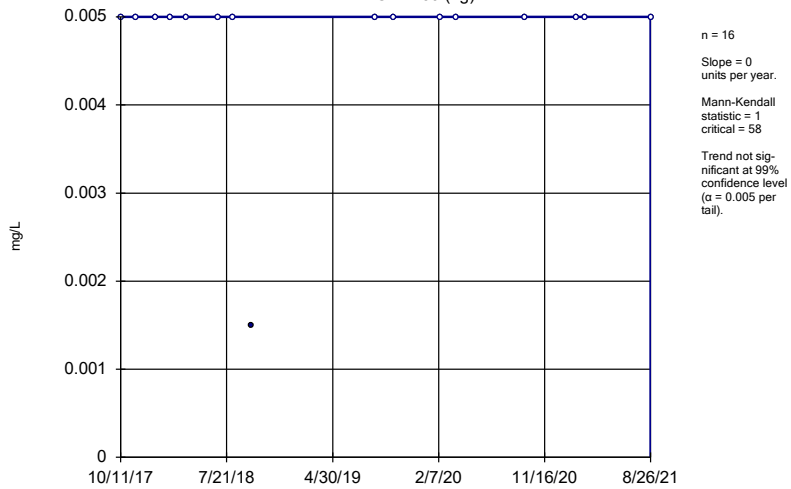
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-39 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 58

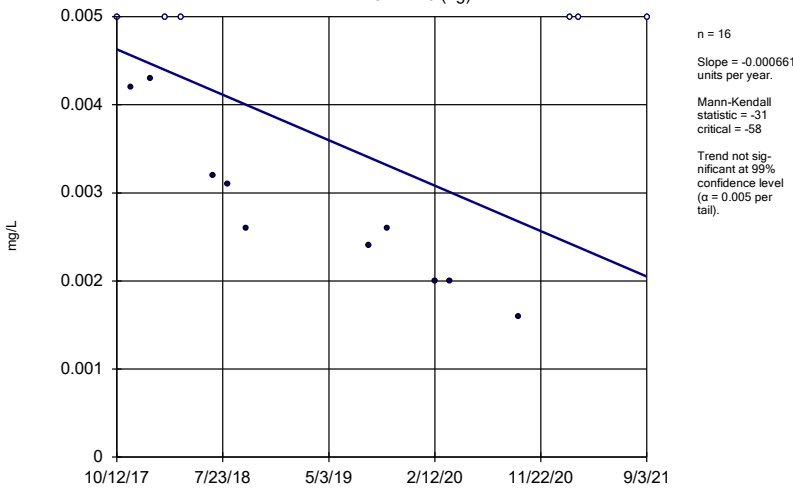
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-40 (bg)



n = 16

Slope = -0.0006615 units per year.

Mann-Kendall statistic = -31
critical = -58

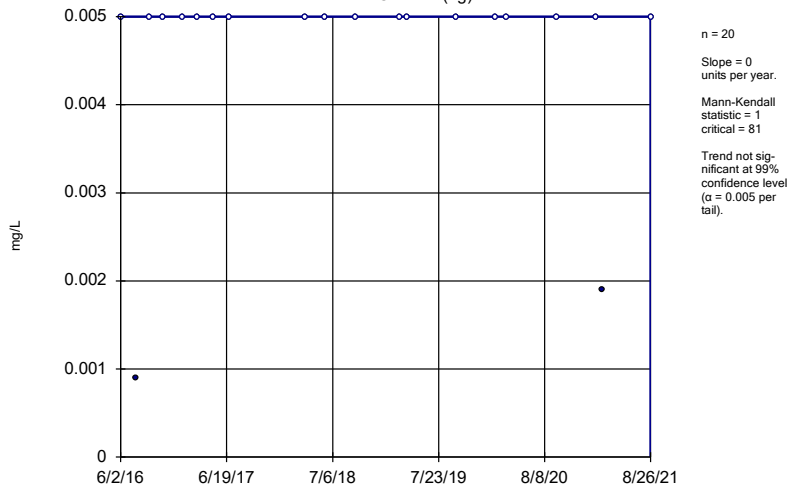
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-4I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 81

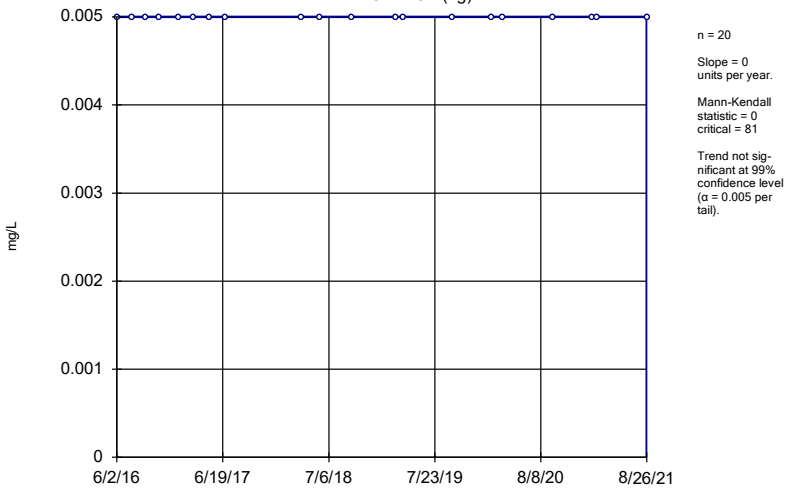
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-5D (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

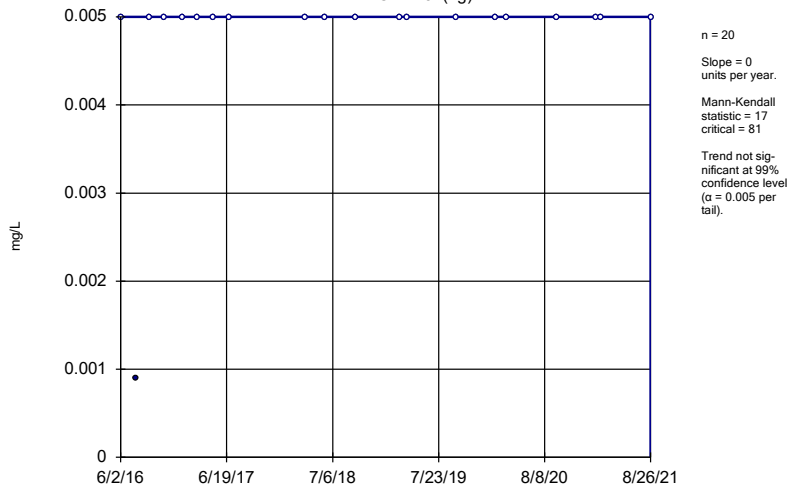
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-5I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 17
critical = 81

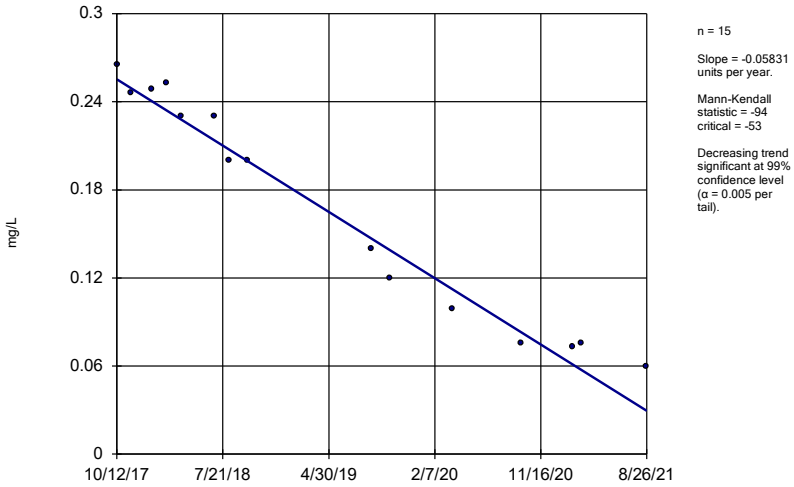
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 15

Slope = -0.05831 units per year.

Mann-Kendall statistic = -94
critical = -53

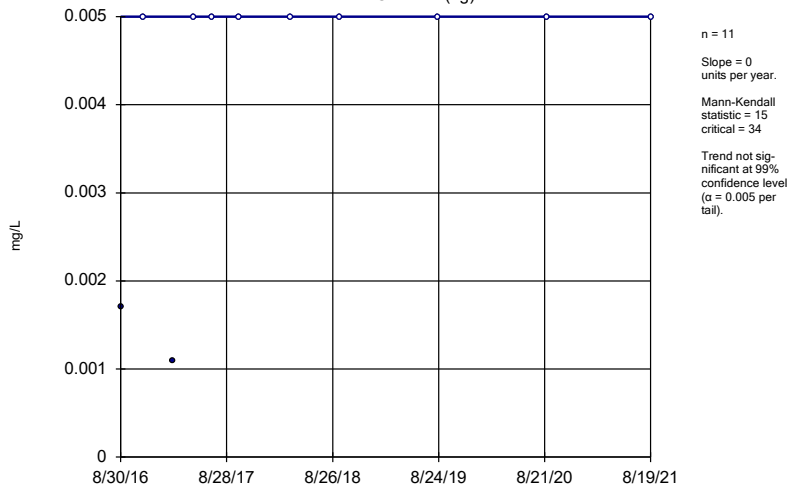
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-47 (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 15
critical = 34

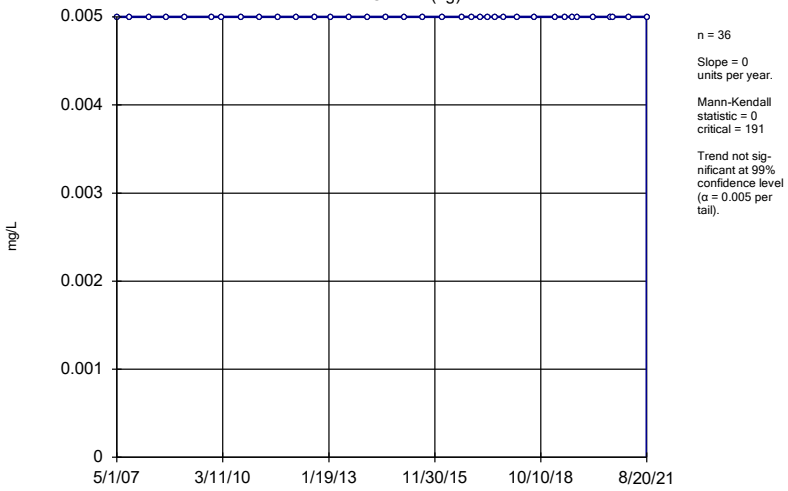
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

GWA-2 (bg)



n = 36

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 191

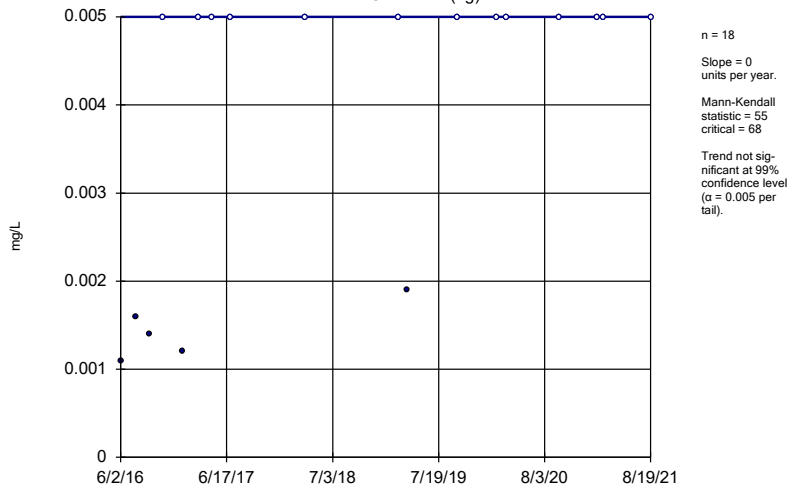
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-14S (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 55
critical = 68

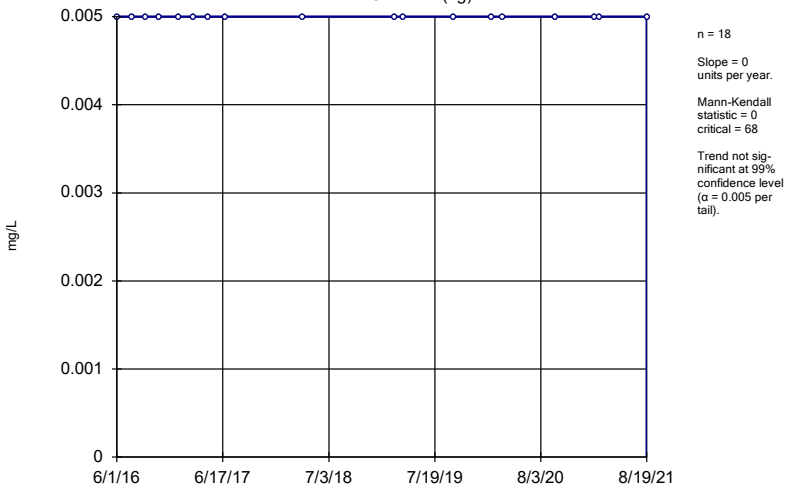
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-1D (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

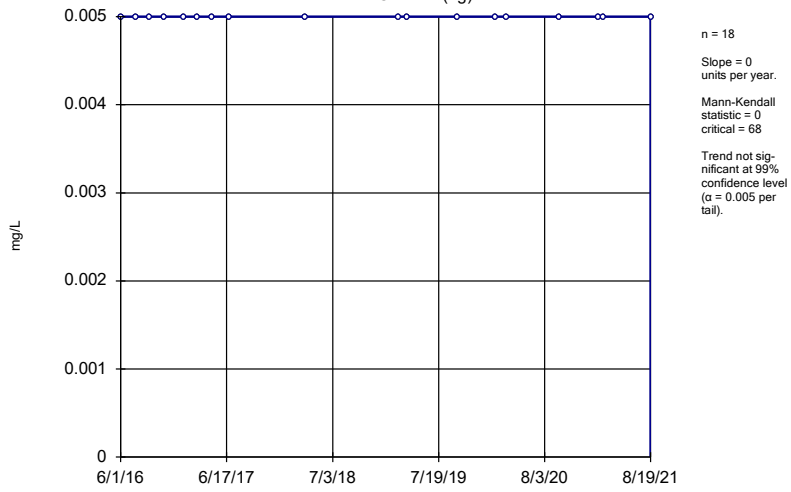
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-1I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

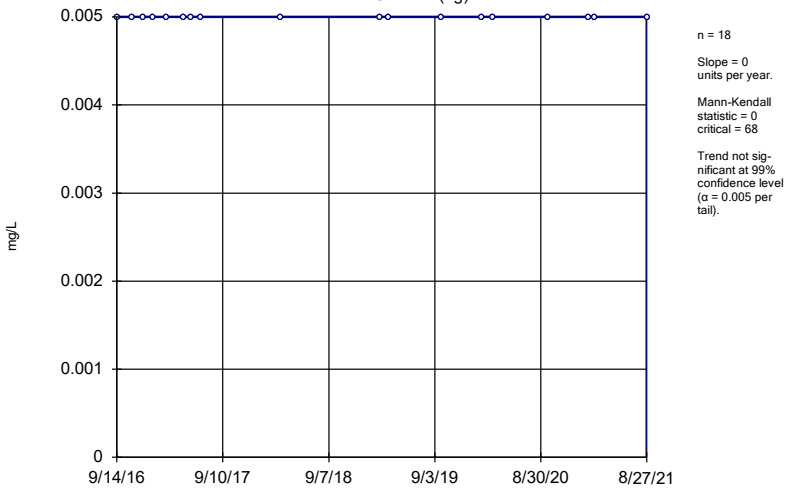
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-2I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 68

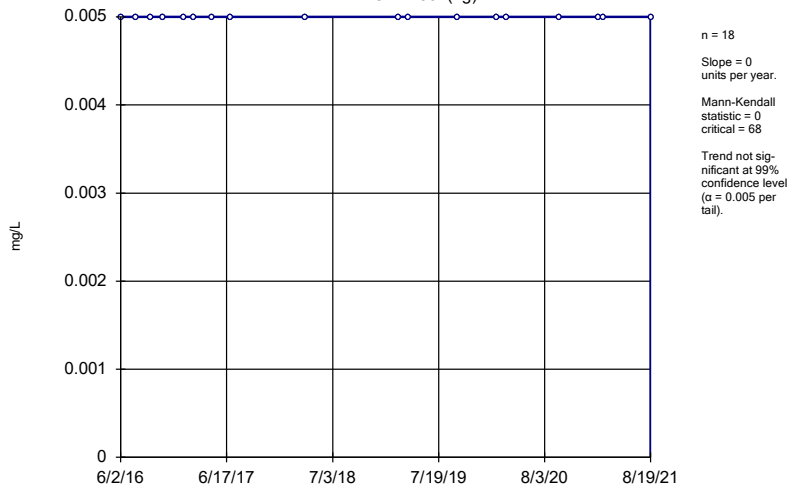
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-30I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 68

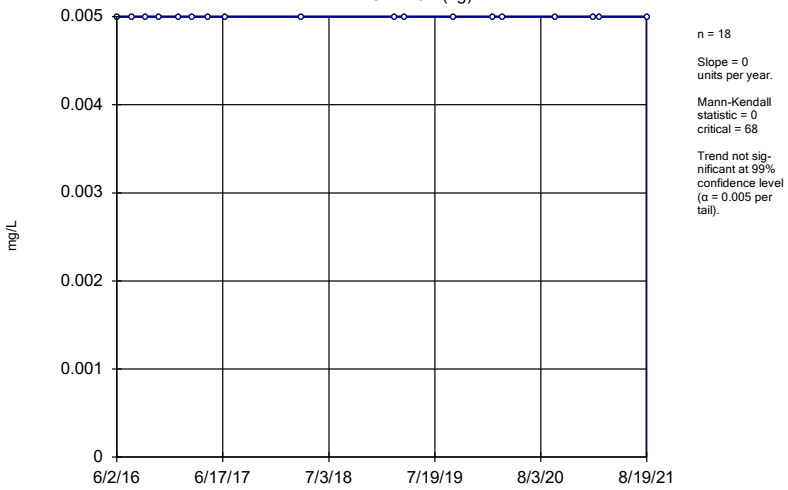
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-3D (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 68

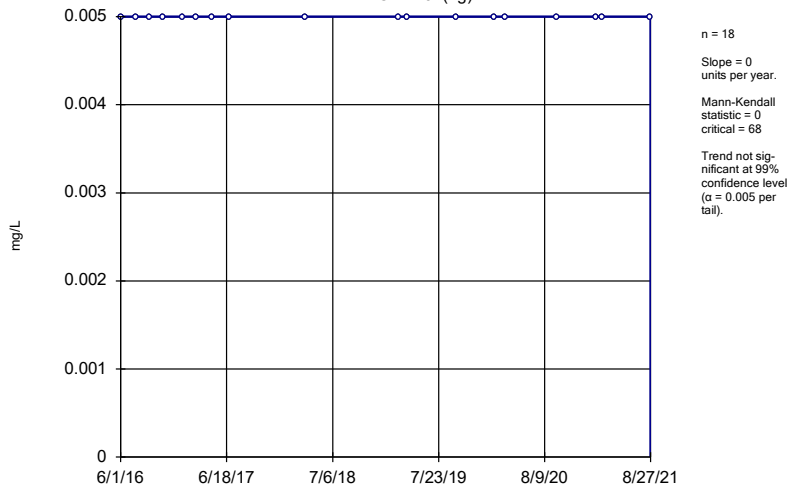
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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

Sen's Slope Estimator

YGWA-3I (bg)



n = 18

Slope = 0 units per year.

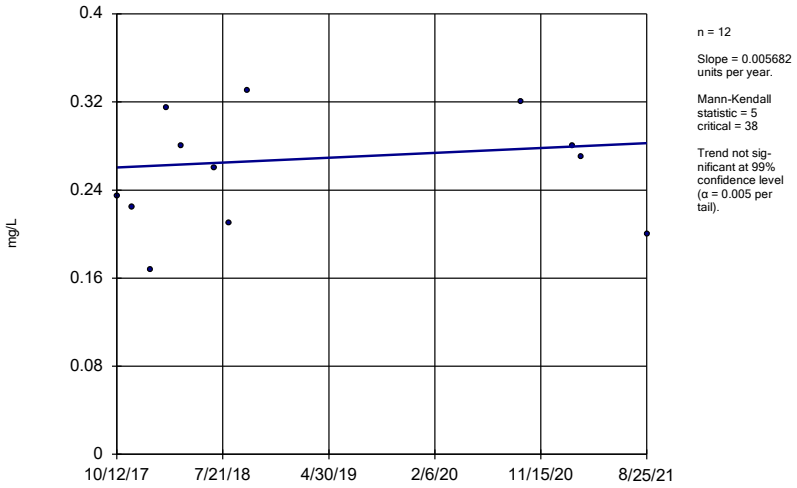
Mann-Kendall statistic = 0 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

PZ-37



n = 12

Slope = 0.005682 units per year.

Mann-Kendall statistic = 5
critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Attachment 4

Analytical Lab Reports

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

September 17, 2021

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

RE: Project: PLANT YATES 30102869
Pace Project No.: 92560846

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: PLANT YATES 30102869
Pace Project No.: 92560846

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: PLANT YATES 30102869
Pace Project No.: 92560846

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560846001	**BH-52-3(82-92)**	Water	09/11/21 12:12	09/13/21 12:51

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

SAMPLE ANALYTE COUNT

Project: PLANT YATES 30102869
Pace Project No.: 92560846

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92560846001	**BH-52-3(82-92)**	EPA 300.0 Rev 2.1 1993	CDC	1

PASI-A = Pace Analytical Services - Asheville

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

SUMMARY OF DETECTION

Project: PLANT YATES 30102869
Pace Project No.: 92560846

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92560846001	**BH-52-3(82-92)**					
EPA 300.0 Rev 2.1 1993	Sulfate	255	mg/L	6.0	09/15/21 15:55	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES 30102869
Pace Project No.: 92560846

Sample: BH-52-3(82-92) **Lab ID: 92560846001** Collected: 09/11/21 12:12 Received: 09/13/21 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**255**	mg/L	6.0	3.0	6		09/15/21 15:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PLANT YATES 30102869
Pace Project No.: 92560846

QC Batch: 647162
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: 92560846001

METHOD BLANK: 3394748 Matrix: Water
Associated Lab Samples: 92560846001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.50	09/14/21 22:53	

LABORATORY CONTROL SAMPLE: 3394749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394750 3394751

Parameter	Units	92560938001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	33.4	50	50	88.5	91.8	110	117	90-110	4	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394752 3394753

Parameter	Units	92560676003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	140	50	50	193	195	105	109	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394754 3394755

Parameter	Units	92560676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	3.8	50	50	62.4	63.7	117	120	90-110	2	10	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: PLANT YATES 30102869
Pace Project No.: 92560846

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES 30102869
Pace Project No.: 92560846

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560846001	**BH-52-3(82-92)**	EPA 300.0 Rev 2.1 1993	647162		

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

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

Sample Condition Upon Receipt

Client Name: Arcadis

Project #: WO# : 92560846

92560846

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

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

Date/Initials Person Examining Contents: 9/13/24 CMP

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

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

Thermometer: ☐ IR Gun ID: 214 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.7 Correction Factor: Add/Subtract (°C) -.01

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

Cooler Temp Corrected (°C): 2.6

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: GW				
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, LL-Hg

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

Project #

WO# : 92560846

PM: NMG Due Date: 09/20/21

CLIENT: CR-CR Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CH)	BP4N-250 mL Plastic Unpreserved (N/A)	BP3U-500 mL Plastic Unpreserved (N/A)	BP3U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic H2SO4 (pH < 2) (CH)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CH)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CH)	AG1H-1 liter Amber HCl (pH < 2)	AG4U-250 mL Amber Unpreserved (N/A) (CH)	AG1U-1 liter Amber H2SO4 (pH < 2)	AG4S-250 mL Amber H2SO4 (pH < 2)	AG4U-250 mL Amber unpreserved (N/A) (CH)	DG9P-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	VG9H-40 mL VOA HCl (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VG9M (8-vials per kit)-5035 kit (N/A)	VG9U (3-vials per kit)-Methanol kit (N/A)	BP1T-125 mL Sterile Plastic (N/A - lab)	BP2T-250 mL Sterile Plastic (N/A - lab)		BP4M-250 mL Plastic DI/H2SO4 (0.1-0.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VG4U-20 mL Scintillation vials (N/A)	DG8U-40 mL Amber Unpreserved vials (N/A)
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTIL Log In Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: ARCADIS

Billing Information:

Address: 2839 Bees Ferry Rd

Report To: GREGORY GAY

Email To:

Copy To:

Site Collection Info/Address:

Customer Project Name/Number: PLANT YATES / 30108869

State: / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Phone: Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print):

Purchase Order #: Quote #:

DW PWS ID #: DW Location Code:

Collected By (signature): Amy E Ferrinello

Turnaround Date Required: 24 hr

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:

Rush: [ ] Same Day [X] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: Diss. metals

Analysis

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Cntrs	Tot. Metals	Diss. Metals	SO4
BH-52-3 (82-92)	GW	G	9/11/24	1215				3	X	X	X

Customer Remarks / Special Conditions / Possible Hazards:

METALS:
Se, Li, B

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N NA

Lab Tracking #: 2655075

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: ____oC
Cooler 1 Therm Corr. Factor: ____oC
Cooler 1 Corrected Temp: ____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
ARCADIS	9/13/24 1251		9/13/24 1251
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTIL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelog#:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

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

September 14, 2021

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

RE: Project: PLANT YATES 30102869
Pace Project No.: 92560845

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 13, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

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

Enclosures

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

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

CERTIFICATIONS

Project: PLANT YATES 30102869
Pace Project No.: 92560845

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: PLANT YATES 30102869
Pace Project No.: 92560845

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560845001	**BH-52-3(82-92)**	Water	09/11/21 12:12	09/13/21 12:51

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

SAMPLE ANALYTE COUNT

Project: PLANT YATES 30102869
Pace Project No.: 92560845

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92560845001	**BH-52-3(82-92)**	EPA 6020B	CW1	3
		EPA 6020B	CW1	3

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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: PLANT YATES 30102869
Pace Project No.: 92560845

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92560845001	**BH-52-3(82-92)**					
EPA 6020B	Boron	2.7	mg/L	0.20	09/13/21 17:05	
EPA 6020B	Lithium	0.042	mg/L	0.030	09/14/21 09:42	
EPA 6020B	Boron, Dissolved	3.0	mg/L	0.20	09/13/21 21:39	
EPA 6020B	Lithium, Dissolved	0.042	mg/L	0.030	09/13/21 21:34	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES 30102869
Pace Project No.: 92560845

Sample: BH-52-3(82-92) **Lab ID: 92560845001** Collected: 09/11/21 12:12 Received: 09/13/21 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**2.7**	mg/L	0.20	0.043	5	09/13/21 13:00	09/13/21 17:05	7440-42-8	
Lithium	**0.042**	mg/L	0.030	0.00073	1	09/13/21 13:00	09/14/21 09:42	7439-93-2	
Selenium	ND	mg/L	0.0050	0.0014	1	09/13/21 13:00	09/13/21 17:00	7782-49-2	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron, Dissolved	**3.0**	mg/L	0.20	0.043	5	09/13/21 13:05	09/13/21 21:39	7440-42-8	
Lithium, Dissolved	**0.042**	mg/L	0.030	0.00073	1	09/13/21 13:05	09/13/21 21:34	7439-93-2	
Selenium, Dissolved	ND	mg/L	0.0050	0.0014	1	09/13/21 13:05	09/13/21 21:34	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PLANT YATES 30102869
Pace Project No.: 92560845

QC Batch: 646726
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92560845001

METHOD BLANK: 3392295 Matrix: Water
Associated Lab Samples: 92560845001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.0086	09/13/21 16:11	
Lithium	mg/L	ND	0.030	0.00073	09/13/21 16:11	
Selenium	mg/L	ND	0.0050	0.0014	09/13/21 16:11	

LABORATORY CONTROL SAMPLE: 3392296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3392297 3392298

Parameter	Units	92560769001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	2.9	1	1	3.9	4.0	86	98	75-125	3	20	
Lithium	mg/L	0.028J	0.1	0.1	0.12	0.12	96	95	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PLANT YATES 30102869
Pace Project No.: 92560845

QC Batch: 646727
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92560845001

METHOD BLANK: 3392300 Matrix: Water
Associated Lab Samples: 92560845001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron, Dissolved	mg/L	ND	0.040	0.0086	09/13/21 20:54	
Lithium, Dissolved	mg/L	ND	0.030	0.00073	09/13/21 20:54	
Selenium, Dissolved	mg/L	ND	0.0050	0.0014	09/13/21 20:54	

LABORATORY CONTROL SAMPLE: 3392301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron, Dissolved	mg/L	1	1.1	108	80-120	
Lithium, Dissolved	mg/L	0.1	0.11	106	80-120	
Selenium, Dissolved	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3392302 3392303

Parameter	Units	92560769001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron, Dissolved	mg/L	2.9	1	1	3.9	3.8	98	95	75-125	1	20	
Lithium, Dissolved	mg/L	0.028J	0.1	0.1	0.12	0.13	95	104	75-125	7	20	
Selenium, Dissolved	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: PLANT YATES 30102869
Pace Project No.: 92560845

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES 30102869
Pace Project No.: 92560845

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560845001	**BH-52-3(82-92)**	EPA 3005A	646726	EPA 6020B	646826
92560845001	**BH-52-3(82-92)**	EPA 3005A	646727	EPA 6020B	646827

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

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

Sample Condition Upon Receipt

Client Name: Arcadis

Project #: ☑ Client

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

WO# : 92560845

92560845

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

Date/Initials Person Examining Contents: 9/13/21 CAP

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

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

Thermometer: ☐ IR Gun ID: 214 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.7 Correction Factor: Add/Subtract (°C) -.01

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

Cooler Temp Corrected (°C): 2.6

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: GW1				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

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

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

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

Project #

WO# : 92560845

PM: NMG Due Date: 08/14/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1				✓ 2																						
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields.

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: ARCADIS

Address: 2831 Aces Ferry Rd

Report To: CHEFFEY, Gary

Copy To:

Customer Project Name/Number: PLANT YATES / 30108869

Billing Information:

Email To:

Site Collection Info/Address:

State: / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Phone: Email:

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print):

Purchase Order #: Quote #:

DW PWS ID #: DW Location Code:

Collected By (signature): Amy E. Ferrell

Turnaround Date Required: 24 hrs

Immediately Packed on Ice: [X] Yes [ ] No

Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:

Rush: [ ] Same Day [X] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: Diss. metals

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Cntrs	Tot. Metals	Diss. Metals	SO4
BH-52-3 (8872)	GW	G	9/11/24	1218				3	X	X	X

Analysis

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

Lab USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

METALS:
Se, Li, B

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2655075

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: ____oC
Cooler 1 Therm Corr. Factor: ____oC
Cooler 1 Corrected Temp: ____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
ARCADIS	9/11/24 1251		9/13/24 1251
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

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

September 17, 2021

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

RE: Project: PLANT YATES 30102869
Pace Project No.: 92560770

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Asheville

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: PLANT YATES 30102869
Pace Project No.: 92560770

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: PLANT YATES 30102869
Pace Project No.: 92560770

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560770001	**BH-52-1-(150-160)**	Water	09/10/21 12:38	09/11/21 08:40
92560770002	**BH-52-2-(113-125)**	Water	09/10/21 14:28	09/11/21 08:40

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: PLANT YATES 30102869
Pace Project No.: 92560770

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92560770001	**BH-52-1-(150-160)**	EPA 300.0 Rev 2.1 1993	CDC	1
92560770002	**BH-52-2-(113-125)**	EPA 300.0 Rev 2.1 1993	CDC	1

PASI-A = Pace Analytical Services - Asheville

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

SUMMARY OF DETECTION

Project: PLANT YATES 30102869
Pace Project No.: 92560770

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92560770001	**BH-52-1-(150-160)**					
EPA 300.0 Rev 2.1 1993	Sulfate	283	mg/L	6.0	09/15/21 15:24	
92560770002	**BH-52-2-(113-125)**					
EPA 300.0 Rev 2.1 1993	Sulfate	278	mg/L	6.0	09/15/21 15:39	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES 30102869
Pace Project No.: 92560770

Sample: BH-52-1-(150-160) **Lab ID: 92560770001** Collected: 09/10/21 12:38 Received: 09/11/21 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**283**	mg/L	6.0	3.0	6		09/15/21 15:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES 30102869
Pace Project No.: 92560770

Sample: BH-52-2-(113-125) **Lab ID: 92560770002** Collected: 09/10/21 14:28 Received: 09/11/21 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**278**	mg/L	6.0	3.0	6		09/15/21 15:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PLANT YATES 30102869
Pace Project No.: 92560770

QC Batch: 647162
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: 92560770001, 92560770002

METHOD BLANK: 3394748 Matrix: Water
Associated Lab Samples: 92560770001, 92560770002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	0.50	09/14/21 22:53	

LABORATORY CONTROL SAMPLE: 3394749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394750 3394751

Parameter	Units	92560938001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	33.4	50	50	88.5	91.8	110	117	90-110	4	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394752 3394753

Parameter	Units	92560676003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	140	50	50	193	195	105	109	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394754 3394755

Parameter	Units	92560676001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	3.8	50	50	62.4	63.7	117	120	90-110	2	10	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: PLANT YATES 30102869
Pace Project No.: 92560770

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES 30102869
Pace Project No.: 92560770

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560770001	**BH-52-1-(150-160)**	EPA 300.0 Rev 2.1 1993	647162		
92560770002	**BH-52-2-(113-125)**	EPA 300.0 Rev 2.1 1993	647162		

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

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

Sample Condition Upon Receipt

Client Name: Arcadis

Project #:

WO# : 92560770

92560770

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

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

Date/Initials Person Examining Contents: 10/27/21

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

Cooler Temp Corrected (°C): 2.8

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 (international, 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. Nitrate 2day rush
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:	Lw			
Headspace in VOA Vials (>6-6mm)?	☐ 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, Lr/Hg

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

Project # **WO# : 92560770**

PM: NMG Due Date: 09/20/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CL)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (CL)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4N-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CL)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CL)	AG2A-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)	AG1H&AG3H-250 mL Amber NaHSO (N/A)(CL)	DG9H-40 mL VOA HCl (N/A)	VG4U-40 mL VOA Unpreserved (N/A)	VG4A-40 mL VOA HCl (N/A)	DG9U-40 mL VOA Unpreserved (N/A) (CL)	VG4S-40 mL VOA H2SO4 (pH < 2)	VG9D-40 mL amber VOA (TSP dechlor)	VG9T-40 mL VOA Na2S2O3 (N/A)	VJ3U-125 mL Glass Unpreserved (N/A)	SP5T-125 mL Sterile Plastic (N/A - 5gr)	SP2T-250 mL Sterile Plastic (N/A - 1gr)		BP4A-250 mL Plastic ZnAcetate (>9 pH)	AG0U-100 mL Amber Unpreserved vials (N/A)	VG9A-40 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1				2																								
2		1				2																								
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

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

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

Pace Analytical

Chain-of-Custody / Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT. Complete all relevant fields.

MTJL Log-In Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: ARCADIS	Billing Information:
Address: 1983 Pecos Ferry Rd	
Report To: Geoffrey Gay	Email To: Geoffrey.Gay@arcadis.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: PLANT YATES / 30102864	State: / County/City: / Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email:	Site/Facility ID #: / Compliance Monitoring? [ ]Yes [ ]No
Collected By (print): Louise Riccitello	Purchase Order #: / Quote #: / DW PWS ID #: / DW Location Code:
Collected (signature):	Turnaround Date Required: 24 Hr / Immediately Packed on Ice: [ ]Yes [ ]No
Sample Disposal: [ ]Dispose as appropriate [ ]Return [ ]Archive: [ ]Hold:	Rush: [ ]Same Day [X]Next Day [ ]2 Day [ ]3 Day [ ]4 Day [ ]5 Day (Expedite Charges Apply) / Field Filtered (if applicable): [X]Yes [ ]No / Analysis: D.S.S. Metals

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Total Metals	Diss Metals (Field Filtered)	SO4
BH-52-1-(150-160)	GW	G	7/10/21	1233				3	X	X	X
BH-52-2-(115-125)	GW	G	7/10/21	1428				3	X	X	X

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analytes

Lab Project Manager:

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA – Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

Lab USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:
Metals:
Se, Li, B

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2655074

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: 1.7 oC
Cooler 1 Therm Corr. Factor: ____ oC
Cooler 1 Corrected Temp: ____ oC
Comments:

Relinquished by/Company: (Signature) ARCADIS	Date/Time: 7/11/21 840	Received by/Company: (Signature)	Date/Time: 7/11/21 0
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ____ of: ____

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

September 14, 2021

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

RE: Project: PLANT YATES 30102869
Pace Project No.: 92560769

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 11, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

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

Enclosures

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

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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CERTIFICATIONS

Project: PLANT YATES 30102869
Pace Project No.: 92560769

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

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

SAMPLE SUMMARY

Project: PLANT YATES 30102869
Pace Project No.: 92560769

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92560769001	**BH-52-1-(150-160)**	Water	09/10/21 12:38	09/11/21 08:40
92560769002	**BH-52-2-(113-125)**	Water	09/10/21 14:28	09/11/21 08:40

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

SAMPLE ANALYTE COUNT

Project: PLANT YATES 30102869
Pace Project No.: 92560769

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92560769001	**BH-52-1-(150-160)**	EPA 6020B	CW1	3
		EPA 6020B	CW1	3
92560769002	**BH-52-2-(113-125)**	EPA 6020B	CW1	3
		EPA 6020B	CW1	3

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

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

SUMMARY OF DETECTION

Project: PLANT YATES 30102869
Pace Project No.: 92560769

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92560769001	**BH-52-1-(150-160)**					
EPA 6020B	Boron	3.1	mg/L	0.20	09/14/21 14:34	
EPA 6020B	Lithium	0.027J	mg/L	0.030	09/13/21 16:22	
EPA 6020B	Boron, Dissolved	2.9	mg/L	0.20	09/14/21 14:57	
EPA 6020B	Lithium, Dissolved	0.028J	mg/L	0.030	09/13/21 21:05	
92560769002	**BH-52-2-(113-125)**					
EPA 6020B	Boron	2.9	mg/L	0.20	09/14/21 14:51	
EPA 6020B	Lithium	0.032	mg/L	0.030	09/14/21 09:36	
EPA 6020B	Boron, Dissolved	3.0	mg/L	0.20	09/14/21 15:14	
EPA 6020B	Lithium, Dissolved	0.031	mg/L	0.030	09/13/21 21:28	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES 30102869
Pace Project No.: 92560769

Sample: BH-52-1-(150-160) **Lab ID: 92560769001** Collected: 09/10/21 12:38 Received: 09/11/21 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**3.1**	mg/L	0.20	0.043	5	09/13/21 11:40	09/14/21 14:34	7440-42-8	
Lithium	**0.027J**	mg/L	0.030	0.00073	1	09/13/21 11:40	09/13/21 16:22	7439-93-2	
Selenium	ND	mg/L	0.0050	0.0014	1	09/13/21 11:40	09/13/21 16:22	7782-49-2	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron, Dissolved	**2.9**	mg/L	0.20	0.043	5	09/13/21 11:50	09/14/21 14:57	7440-42-8	
Lithium, Dissolved	**0.028J**	mg/L	0.030	0.00073	1	09/13/21 11:50	09/13/21 21:05	7439-93-2	
Selenium, Dissolved	ND	mg/L	0.0050	0.0014	1	09/13/21 11:50	09/13/21 21:05	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: PLANT YATES 30102869
Pace Project No.: 92560769

Sample: BH-52-2-(113-125) **Lab ID: 92560769002** Collected: 09/10/21 14:28 Received: 09/11/21 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron	**2.9**	mg/L	0.20	0.043	5	09/13/21 11:40	09/14/21 14:51	7440-42-8	
Lithium	**0.032**	mg/L	0.030	0.00073	1	09/13/21 11:40	09/14/21 09:36	7439-93-2	
Selenium	ND	mg/L	0.0050	0.0014	1	09/13/21 11:40	09/13/21 16:54	7782-49-2	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Boron, Dissolved	**3.0**	mg/L	0.20	0.043	5	09/13/21 11:50	09/14/21 15:14	7440-42-8	
Lithium, Dissolved	**0.031**	mg/L	0.030	0.00073	1	09/13/21 11:50	09/13/21 21:28	7439-93-2	
Selenium, Dissolved	ND	mg/L	0.0050	0.0014	1	09/13/21 11:50	09/13/21 21:28	7782-49-2	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PLANT YATES 30102869
Pace Project No.: 92560769

QC Batch: 646726
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92560769001, 92560769002

METHOD BLANK: 3392295 Matrix: Water
Associated Lab Samples: 92560769001, 92560769002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron	mg/L	ND	0.040	0.0086	09/13/21 16:11	
Lithium	mg/L	ND	0.030	0.00073	09/13/21 16:11	
Selenium	mg/L	ND	0.0050	0.0014	09/13/21 16:11	

LABORATORY CONTROL SAMPLE: 3392296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron	mg/L	1	0.99	99	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3392297 3392298

Parameter	Units	92560769001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	2.9	1	1	3.9	4.0	86	98	75-125	3	20	
Lithium	mg/L	0.028J	0.1	0.1	0.12	0.12	96	95	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: PLANT YATES 30102869
Pace Project No.: 92560769

QC Batch: 646727
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92560769001, 92560769002

METHOD BLANK: 3392300 Matrix: Water
Associated Lab Samples: 92560769001, 92560769002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Boron, Dissolved	mg/L	ND	0.040	0.0086	09/13/21 20:54	
Lithium, Dissolved	mg/L	ND	0.030	0.00073	09/13/21 20:54	
Selenium, Dissolved	mg/L	ND	0.0050	0.0014	09/13/21 20:54	

LABORATORY CONTROL SAMPLE: 3392301

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron, Dissolved	mg/L	1	1.1	108	80-120	
Lithium, Dissolved	mg/L	0.1	0.11	106	80-120	
Selenium, Dissolved	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3392302 3392303

Parameter	Units	92560769001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron, Dissolved	mg/L	2.9	1	1	3.9	3.8	98	95	75-125	1	20	
Lithium, Dissolved	mg/L	0.028J	0.1	0.1	0.12	0.13	95	104	75-125	7	20	
Selenium, Dissolved	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: PLANT YATES 30102869
Pace Project No.: 92560769

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: PLANT YATES 30102869
Pace Project No.: 92560769

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92560769001	**BH-52-1-(150-160)**	EPA 3005A	646726	EPA 6020B	646826
92560769002	**BH-52-2-(113-125)**	EPA 3005A	646726	EPA 6020B	646826
92560769001	**BH-52-1-(150-160)**	EPA 3005A	646727	EPA 6020B	646827
92560769002	**BH-52-2-(113-125)**	EPA 3005A	646727	EPA 6020B	646827

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

WO# : 92560769

ALL SHADED AREAS are for LAB USE ONLY

Company: ARCADIS

Address: 1939 Ames Ferry Rd.

Report To: Geoffrey Gay

Copy To:

Billing Information:

Email To: geoffrey.gay@arcadis.com

Site Collection Info/Address:

Customer Project Name/Number: Plant Yates / 30102869

Collected By (print): Angie Rizziello

Collected By (signature): [illegible]

Turnaround Date Required: 24 Hr

Rush: ( ) Same Day (X) Next Day ( ) 2 Day ( ) 3 Day ( ) 4 Day ( ) 5 Day

Field Filtered (if applicable): (X) Yes ( ) No Analysis: Dis. metals

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected Date	Collected Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Tot Metals	Dis Metals (field filtered)	SO4
BH-52-1-(150-160)	GW	G	9/10/21	1235				3	X	X	X
BH-52-2-(115-125)	GW	G	9/10/21	1448				3	X	X	X

Customer Remarks / Special Conditions / Possible Hazards: Metals: Sr, Li, B

Type of Ice Used: (Wet) Blue Dry None

Lab Tracking #: 2655074

Relinquished by/Company (Signature): [illegible] ARCADIS — Date/Time: 9/11/21 840

Received by/Company (Signature): [illegible] PACE — Date/Time: 9/11/21 0[illegible]

Relinquished by/Company (Signature): — Date/Time:

Received by/Company (Signature): — Date/Time:

Relinquished by/Company (Signature): — Date/Time:

Received by/Company (Signature): — Date/Time:

LAB SAMPLE TEMPERATURE: Cooler 1 Temp Upon Receipt: 0.7 °C

Non Conformance(s): YES / NO

Pace Analytical

Document Name: Sample Condition Upon Receipt(SCUR)
Document No.: F-GAA-CL-033-rev.03
Document Revised: October 28 2020
Page 1 of 2
Issuing Authority: Pace Carolinas Quality Office

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

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

Project #

WO#: 92560769
PM: MNG Due Date: 09/15/21
CLIENT: GA-GA Power

Client Name: Arcadis

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

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

Thermometer: ☐ IR Gun ID: 410 Type of Ice: ☐ Wet ☐ Blue ☐ None

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

Cooler Temp: 4.7 Correction Factor: Add/Subtract (°C): 0.1

Cooler Temp Corrected (°C): 4.8

USDA Regulated Soil (☐ N/A, water sample)

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

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ 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. per email dated 9/1
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.
Unpreserved 8260/5035 Vials Received?	☑ Yes	☐ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	GW			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

Pace Trip Blank Lot (if purchased): Client Trip Blank ID:

Additional Comments: Additional Comments Received? ☐ Yes ☐ No

Log-in of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: Date/Time:

WO#: 92560770
PM: MNG Due Date: 09/20/21
CLIENT: GA-GA Power

Project Manager SCURF Review:

Project Manager SRF Review:

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

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

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

Project

WO# : 92560769

PM: NMG Due Date: 08/15/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP3N-250 mL plastic HNO3 (pH < 2) (Cl-)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1																										
2		1																										
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

WO# : 92560770

PM: NMG Due Date: 08/20/21

CLIENT: GA-GA Power

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

November 15, 2021

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

RE: Project: YATES
Pace Project No.: 92570779

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on November 04, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

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

CERTIFICATIONS

Project: YATES
Pace Project No.: 92570779

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92570779

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92570779001	**PZ-52D**	Water	11/04/21 12:41	11/04/21 16:50

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(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92570779

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92570779001	**PZ-52D**	EPA 6010D	DRB	1
		EPA 6020B	KH	12
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3

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

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

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92570779

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92570779001	**PZ-52D**					
EPA 6010D	Calcium	25.6	mg/L	1.0	11/09/21 17:25	
EPA 6020B	Arsenic	0.0019J	mg/L	0.0050	11/12/21 15:36	
EPA 6020B	Barium	0.026	mg/L	0.0050	11/12/21 15:36	
EPA 6020B	Boron	0.69	mg/L	0.040	11/12/21 15:36	
EPA 6020B	Cobalt	0.00082J	mg/L	0.0050	11/12/21 15:36	
EPA 6020B	Lead	0.0010	mg/L	0.0010	11/12/21 15:36	
EPA 6020B	Lithium	0.016J	mg/L	0.030	11/12/21 15:36	
EPA 6020B	Molybdenum	0.012	mg/L	0.010	11/12/21 15:36	
EPA 6020B	Selenium	0.0034J	mg/L	0.0050	11/12/21 15:36	
SM 2540C-2015	Total Dissolved Solids	426	mg/L	10.0	11/09/21 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	9.5	mg/L	1.0	11/06/21 22:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	11/06/21 22:19	
EPA 300.0 Rev 2.1 1993	Sulfate	191	mg/L	4.0	11/07/21 19:25	

Pace Analytical Services, LLC
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(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92570779

Sample: PZ-52D **Lab ID: 92570779001** Collected: 11/04/21 12:41 Received: 11/04/21 16:50 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	**25.6**	mg/L	1.0	0.12	1	11/09/21 12:22	11/09/21 17:25	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	0.00078	1	11/10/21 11:56	11/12/21 15:36	7440-36-0	
Arsenic	**0.0019J**	mg/L	0.0050	0.0011	1	11/10/21 11:56	11/12/21 15:36	7440-38-2	
Barium	**0.026**	mg/L	0.0050	0.00067	1	11/10/21 11:56	11/12/21 15:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	11/10/21 11:56	11/12/21 15:36	7440-41-7	
Boron	**0.69**	mg/L	0.040	0.0086	1	11/10/21 11:56	11/12/21 15:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	11/10/21 11:56	11/12/21 15:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	11/10/21 11:56	11/12/21 15:36	7440-47-3	
Cobalt	**0.00082J**	mg/L	0.0050	0.00039	1	11/10/21 11:56	11/12/21 15:36	7440-48-4	
Lead	**0.0010**	mg/L	0.0010	0.00089	1	11/10/21 11:56	11/12/21 15:36	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00073	1	11/10/21 11:56	11/12/21 15:36	7439-93-2	
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	11/10/21 11:56	11/12/21 15:36	7439-98-7	
Selenium	**0.0034J**	mg/L	0.0050	0.0014	1	11/10/21 11:56	11/12/21 15:36	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	11/10/21 14:30	11/11/21 12:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**426**	mg/L	10.0	10.0	1		11/09/21 13:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.5**	mg/L	1.0	0.60	1		11/06/21 22:19	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		11/06/21 22:19	16984-48-8	
Sulfate	**191**	mg/L	4.0	2.0	4		11/07/21 19:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658492
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92570779001

METHOD BLANK: 3451224 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	11/09/21 16:17	

LABORATORY CONTROL SAMPLE: 3451225

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3451226 3451227

Parameter	Units	92570510020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	26900 ug/L	1	1	28.0	27.7	110	83	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658792
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92570779001

METHOD BLANK: 3452768 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	11/12/21 14:00	
Arsenic	mg/L	ND	0.0050	0.0011	11/12/21 14:00	
Barium	mg/L	ND	0.0050	0.00067	11/12/21 14:00	
Beryllium	mg/L	ND	0.00050	0.000054	11/12/21 14:00	
Boron	mg/L	ND	0.040	0.0086	11/12/21 14:00	
Cadmium	mg/L	ND	0.00050	0.00011	11/12/21 14:00	
Chromium	mg/L	ND	0.0050	0.0011	11/12/21 14:00	
Cobalt	mg/L	ND	0.0050	0.00039	11/12/21 14:00	
Lead	mg/L	ND	0.0010	0.00089	11/12/21 14:00	
Lithium	mg/L	ND	0.030	0.00073	11/12/21 14:00	
Molybdenum	mg/L	ND	0.010	0.00074	11/12/21 14:00	
Selenium	mg/L	ND	0.0050	0.0014	11/12/21 14:00	

LABORATORY CONTROL SAMPLE: 3452769

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	111	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.11	107	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	105	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3452770 3452771

Parameter	Units	92570961001 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	0.10	105	104	75-125	1	20	
Arsenic	mg/L	1.7J ug/L	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Barium	mg/L	54.1J ug/L	0.1	0.1	0.16	0.16	109	102	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3452770 3452771

Parameter	Units	92570961001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	0.98	1.0	97	99	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	101	105	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Lithium	mg/L	3.4J ug/L	0.1	0.1	0.10	0.11	100	103	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.099	106	98	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658716
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92570779001

METHOD BLANK: 3452442 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	11/11/21 11:05	

LABORATORY CONTROL SAMPLE: 3452443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3452444 3452445

Parameter	Units	92569467029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0024	98	96	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658465
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: 92570779001

METHOD BLANK: 3451097 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	11/09/21 13:10	

LABORATORY CONTROL SAMPLE: 3451098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	376	94	80-120	

SAMPLE DUPLICATE: 3451099

Parameter	Units	92570215002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	75.0	82.0	9	25	

SAMPLE DUPLICATE: 3451100

Parameter	Units	92570749003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	249	249	0	25	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 657854
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: 92570779001

METHOD BLANK: 3448274 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	11/06/21 15:35	
Fluoride	mg/L	ND	0.10	0.050	11/06/21 15:35	
Sulfate	mg/L	ND	1.0	0.50	11/06/21 15:35	

LABORATORY CONTROL SAMPLE: 3448275

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	45.2	90	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	47.5	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448276 3448277

Parameter	Units	92570531001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.5	50	50	51.8	52.1	93	93	90-110	1	10	
Fluoride	mg/L	0.098J	2.5	2.5	2.6	2.6	99	99	90-110	0	10	
Sulfate	mg/L	48.5	50	50	97.6	97.8	98	99	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448278 3448279

Parameter	Units	92570531011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.3	50	50	62.8	62.9	93	93	90-110	0	10	
Fluoride	mg/L	0.071J	2.5	2.5	2.4	2.5	95	95	90-110	1	10	
Sulfate	mg/L	10.6	50	50	59.8	60.0	98	99	90-110	0	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES
Pace Project No.: 92570779

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92570779

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92570779001	**PZ-52D**	EPA 3010A	658492	EPA 6010D	658495
92570779001	**PZ-52D**	EPA 3005A	658792	EPA 6020B	658798
92570779001	**PZ-52D**	EPA 7470A	658716	EPA 7470A	659043
92570779001	**PZ-52D**	SM 2540C-2015	658465		
92570779001	**PZ-52D**	EPA 300.0 Rev 2.1 1993	657854		

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

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

Sample Condition Upon Receipt

Client Name: Arcadis

Project #: WO# : 92570779

92570779

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

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

Date/Initials Person Examining Contents: 11/9/21 KDW

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

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

Thermometer: ☐ IR Gun ID: THR214 ☐ Wet ☐ Blue ☐ None **Type of Ice:**

Cooler Temp: 2.8 **Correction Factor: Add/Subtract (°C):** +0

Cooler Temp Corrected (°C): 2.8

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:	WT			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

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

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

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

Project # **WO# : 92570779**

PM: NMD Due Date: 11/18/21

CLIENT: GR-GR Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4C-125 mL Plastic H2SO4 (pH < 2) (D)	BP4N-250 mL plastic HNO3 (pH < 2)	BP4S-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CN)	WPDU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (U)	AG1H-1 liter Amber HCl (pH < 2)	AG1U-250 mL Amber Unpreserved (N/A) (U)	AG2S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3AB(DG8A)-250 mL Amber NAHSO (N/A)(CH)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NaTiO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H2SO4 (N/A)	VG9M (8 vials per kit)-MeOH Kit (N/A)	VG9D (8 vials per kit)-NaHSO4 Kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP1N-250 mL Plastic (NaOH+Ascorbic Acid) (S & N)	AG0U-100 mL Amber Unpreserved (N/A)	WGKU-32 mL Scintillation Vials (N/A)	BG3U-40 mL Amber Unpreserved (N/A)
1		1				1																			2			
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of the 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.

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

Page: 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis (GA Power)	Report To:	Augie Paninello	Attention:	
Address:	2 E. New St.	Copy To:		Company Name:	
Winder, GA 30680				Address:	
Email:	Augusta.Paninello@arcadis.com	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates	Pace Project Manager:	nicole.d'oleo@pacelabs.com,
Requested Due Date:		Project #:		Pace Profile #:	10940

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	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*	TDS	Cl, F, SO4	RAD 9315/9320	Residual Chlorine (Y/N)
1	YD-020	WT		[illegible]	1240				5	3		2							X	X	X	X	
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Yes FL	[signature]	[illegible]	1650	[signature] Pace	[illegible]	1650	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

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

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

November 22, 2021

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

RE: Project: YATES
Pace Project No.: 92573150

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on November 18, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

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

CERTIFICATIONS

Project: YATES
Pace Project No.: 92573150

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Peachtree Corners

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92573150

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92573150001	**PZ-51**	Water	11/17/21 17:48	11/18/21 10:00
92573150002	**YAMW-3**	Water	11/17/21 16:07	11/18/21 10:00
92573150003	**EB-01**	Water	11/17/21 16:20	11/18/21 10:00

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

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92573150

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92573150001	**PZ-51**	EPA 6020B	CW1	1
92573150002	**YAMW-3**	EPA 6020B	CW1	1
		EPA 6020B	CW1	1
92573150003	**EB-01**	EPA 6020B	CW1	1

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

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

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92573150

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92573150001	**PZ-51**					
	Performed by	CUSTOMER			11/18/21 12:44	
	pH	6.15	Std. Units		11/18/21 12:44	
EPA 6020B	Lithium	0.0049J	mg/L	0.030	11/19/21 19:34	
92573150002	**YAMW-3**					
	Performed by	CUSTOMER			11/18/21 12:44	
	pH	6.01	Std. Units		11/18/21 12:44	
EPA 6020B	Lithium	0.046	mg/L	0.030	11/20/21 14:30	
EPA 6020B	Lithium, Dissolved	0.047	mg/L	0.030	11/19/21 15:56	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92573150

Sample: PZ-51 **Lab ID: 92573150001** Collected: 11/17/21 17:48 Received: 11/18/21 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		11/18/21 12:44		
pH	**6.15**	Std. Units			1		11/18/21 12:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.0049J**	mg/L	0.030	0.00073	1	11/18/21 12:52	11/19/21 19:34	7439-93-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92573150

Sample: YAMW-3 **Lab ID: 92573150002** Collected: 11/17/21 16:07 Received: 11/18/21 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		11/18/21 12:44		
pH	**6.01**	Std. Units			1		11/18/21 12:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.046**	mg/L	0.030	0.00073	1	11/18/21 12:52	11/20/21 14:30	7439-93-2	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium, Dissolved	**0.047**	mg/L	0.030	0.00073	1	11/18/21 11:56	11/19/21 15:56	7439-93-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92573150

Sample: EB-01 **Lab ID: 92573150003** Collected: 11/17/21 16:20 Received: 11/18/21 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	ND	mg/L	0.030	0.00073	1	11/18/21 12:52	11/19/21 20:04	7439-93-2	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92573150

QC Batch: 660609
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92573150001, 92573150002, 92573150003

METHOD BLANK: 3461472 Matrix: Water
Associated Lab Samples: 92573150001, 92573150002, 92573150003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.030	0.00073	11/19/21 17:41	

LABORATORY CONTROL SAMPLE: 3461473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.1	0.12	117	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3461474 3461475

Parameter	Units	92572746001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	ND	0.1	0.1	0.12	0.12	117	116	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92573150

QC Batch: 660611
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92573150002

METHOD BLANK: 3461481 Matrix: Water
Associated Lab Samples: 92573150002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium, Dissolved	mg/L	ND	0.030	0.00073	11/19/21 14:38	

LABORATORY CONTROL SAMPLE: 3461482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium, Dissolved	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3461483 3461484

Parameter	Units	92572944005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium, Dissolved	mg/L	31.2J ug/L	0.1	0.1	0.13J	0.13J	96	97	75-125		20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES
Pace Project No.: 92573150

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92573150

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92573150001	**PZ-51**				
92573150002	**YAMW-3**				
92573150001	**PZ-51**	EPA 3005A	660609	EPA 6020B	660862
92573150002	**YAMW-3**	EPA 3005A	660609	EPA 6020B	660862
92573150003	**EB-01**	EPA 3005A	660609	EPA 6020B	660862
92573150002	**YAMW-3**	EPA 3005A	660611	EPA 6020B	660834

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

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: WO# : 92573150

92573150

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

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

Date/Initials Person Examining Contents: MT 10/31/24

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

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

Thermometer: ☐ IR Gun ID: 093

Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) +0.3

Cooler Temp Corrected (°C): 3.7

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. 48 Hr Rush
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: WT				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

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

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

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

Project WO#: 92573150

PM: NMG Due Date: 11/22/21

CLIENT: GA-GA Power

Box#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (3 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1						✓ 1																						
2						✓ 1																						
3						✓ 1																						
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

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

Page: 1 Of 1

Section A — Required Client Information:

- Company: Georgia Power
- Address: 2828 Pace Ferry Rd.
- [illegible], GA 30339
- Email: [illegible]
- Phone: [illegible] Fax:
- Requested Due Date: 48 hr TAT

Section B — Required Project Information:

- Report To: Geoffrey Gay
- Copy To:
- Purchase Order #:
- Project Name: Yates
- Project #:

Section C — Invoice Information:

- Attention:
- Company Name:
- Address:
- Pace Quote:
- Pace Project Manager: [illegible]@pacelabs.com,
- Pace Profile #: [illegible]

Regulatory Agency:

State / Location: GA

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

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start Date	Collected Start Time	Collected End Date	Collected End Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Lithium Only	Dis. Lithium	Residual Chlorine (Y/N)	
1	PZ-01	WT				[illegible]	[illegible]		1			1							x	[illegible]		
2	[illegible]	WT				[illegible]	[illegible]		2			2							x	X		Field Filtered Dissolved Sample
3	~~[illegible]~~					[illegible]	[illegible]		[illegible]													
4	[illegible]-01					[illegible]	[illegible]		1			Y							X			
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
48 hr TAT Rush	Geoff Gay	11/18/[illegible]	1024	[illegible]	11/18	1020	

SAMPLER NAME AND SIGNATURE

- PRINT Name of SAMPLER:
- SIGNATURE of SAMPLER: DATE Signed:

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

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

December 21, 2021

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

RE: Project: YATES
Pace Project No.: 92577105

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on December 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Peachtree Corners, GA

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: YATES
Pace Project No.: 92577105

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92577105

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92577105001	**YAMW-3-W-12092021**	Water	12/09/21 16:27	12/10/21 09:24
92577105002	**EB-01-12092021**	Water	12/09/21 16:38	12/10/21 09:24
92577105003	**FB-01-12092021**	Water	12/09/21 16:40	12/10/21 09:24

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SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92577105

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92577105001	**YAMW-3-W-12092021**	EPA 6020B	CW1	1
		EPA 6020B	CW1	1
92577105002	**EB-01-12092021**	EPA 6020B	CW1	1
92577105003	**FB-01-12092021**	EPA 6020B	CW1	1

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

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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92577105

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92577105001	**YAMW-3-W-12092021**					
EPA 6020B	Lithium	0.042	mg/L	0.030	12/15/21 14:56	
EPA 6020B	Lithium, Dissolved	0.043	mg/L	0.030	12/20/21 15:19	

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92577105

Sample: YAMW-3-W-12092021 **Lab ID: 92577105001** Collected: 12/09/21 16:27 Received: 12/10/21 09:24 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.042**	mg/L	0.030	0.00073	1	12/14/21 09:52	12/15/21 14:56	7439-93-2	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium, Dissolved	**0.043**	mg/L	0.030	0.00073	1	12/20/21 10:31	12/20/21 15:19	7439-93-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92577105

Sample: EB-01-12092021 **Lab ID: 92577105002** Collected: 12/09/21 16:38 Received: 12/10/21 09:24 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	ND	mg/L	0.030	0.00073	1	12/14/21 09:52	12/14/21 18:53	7439-93-2	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92577105

Sample: FB-01-12092021 **Lab ID: 92577105003** Collected: 12/09/21 16:40 Received: 12/10/21 09:24 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	ND	mg/L	0.030	0.00073	1	12/14/21 09:52	12/14/21 18:59	7439-93-2	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92577105

QC Batch: 665921
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92577105001, 92577105002, 92577105003

METHOD BLANK: 3488550 Matrix: Water
Associated Lab Samples: 92577105001, 92577105002, 92577105003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.030	0.00073	12/14/21 16:12	

LABORATORY CONTROL SAMPLE: 3488551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3488552 3488553

Parameter	Units	92577311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	ND	0.1	0.1	0.11	0.12	109	116	75-125	7	20	

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92577105

QC Batch: 667255
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92577105001

METHOD BLANK: 3495441 Matrix: Water
Associated Lab Samples: 92577105001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium, Dissolved	mg/L	ND	0.030	0.00073	12/20/21 15:08	

LABORATORY CONTROL SAMPLE: 3495442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium, Dissolved	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3495443 3495444

Parameter	Units	92577105001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium, Dissolved	mg/L	0.042	0.1	0.1	0.15	0.14	105	99	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES
Pace Project No.: 92577105

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.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92577105

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92577105001	**YAMW-3-W-12092021**	EPA 3005A	665921	EPA 6020B	665974
92577105002	**EB-01-12092021**	EPA 3005A	665921	EPA 6020B	665974
92577105003	**FB-01-12092021**	EPA 3005A	665921	EPA 6020B	665974
92577105001	**YAMW-3-W-12092021**	EPA 3005A	667255	EPA 6020B	667263

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

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

Sample Condition Upon Receipt

Client Name: Arcadis GA Power

Project #:

WO# : 92577105

92577105

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

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

Date/Initials Person Examining Contents: MJT 10/30/21

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

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

Thermometer: ☐ IR Gun ID: 095 ☑ Wet ☐ Blue ☐ None **Type of Ice:**

Cooler Temp: 3.1 **Correction Factor:** Add/Subtract (°C) ±0.3

Cooler Temp Corrected (°C): 3.4

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:	WT			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

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

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

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

Project # **WO# : 92577105**

PM: NMG Due Date: 12/21/21

CLIENT: GA-GA Power

Items#	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)	BP4N-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)	WGKU-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)	AG2S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG9H)-250 mL Amber NaHSO (N/A)(SC)	DG9H-40 mL VOA HCl (N/A)	VG9H-40 mL VOA H2SO4 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9H-40 mL VOA H2SO4 (N/A)	VG9A (3 vials per MQ) 40 mL VOA NaHSO4 (N/A)	VG9D (3 vials per MQ) 40mL VOA NH4Cl (N/A)	SP5T-125 mL Sterile Plastic (N/A - Lab)	SP5T-250 mL Sterile Plastic (N/A - Lab)		BP3A-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Headspace vials (N/A)	DG9Q-40 mL Amber Unpreserved vials (N/A)
1						2																						
2						2																						
3						2																						
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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.

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

Page: 1 Of 1

Section A — Required Client Information:	Section B — Required Project Information:	Section C — Invoice Information:
Company: Arcadis (GA Power)	Report To: Grant Willford	Attention:
Address: 1734 Kimberly Dr. SW	Copy To:	Company Name:
Marietta, GA 30008		Address:
Email: [illegible]	Purchase Order #:	Pace Quote:
Phone: [illegible] Fax:	Project Name: Yates	Pace Project Manager: [illegible]
Requested Due Date: Standard TAT	Project #:	Pace Profile #: 10940

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	6020 Li	Dissolved Li	Residual Chlorine (Y/N)
1	YAMW-3-U-12092021	WG		12/9/21	1615	12/9/21	1617		2			X						X	X	
2	EB-01-12092021	WG		12/9/21	1630				1			X						X		
3	FB-01-12092021	WG		12/9/21	1640				1			X						X		
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Requested Analysis Filtered (Y/N): Dissolved Li — Y

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Please send lab report to [illegible]	Grant Willford / Arcadis	12/10/21	0834	[signature] / Pace	12/10/2021		

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Grant Willford
SIGNATURE of SAMPLER:	[signature]
DATE Signed:	12/10/2021

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

Arcadis U.S., Inc.

2839 Paces Ferry Road, Suite 900
Atlanta
Georgia 30339
Phone: 770 431 8666
Fax: 770 435 2666
www.arcadis.com

Appendix B

Field Sampling and Well Inspection Forms (February, March, August, September, November 2021)

Well Repair Memorandum (2021)

MEMORANDUM

Date: November 19, 2021

To: Lauren Coker – Southern Company Services

CC: Ben Hodges – Georgia Power Company

From: Arcadis U.S., Inc.

Subject: Plant Yates AP-3, A, B, B', and R6 CCR Landfill
Well Maintenance and Repair Documentation
Georgia Power Company

Arcadis U.S., Inc. (Arcadis) has prepared this memorandum to provide documentation of groundwater monitoring well maintenance and/or repair performed at Plant Yates AP-3, A, B, B', and R6 CCR Landfill during the annual reporting period. All repairs and maintenance were completed in accordance with the Georgia Environmental Protection Division (GAEPD) guidance on routine visual inspections of groundwater monitoring wells.

Georgia Power Site/Unit	Date Performed	Well ID	Maintenance/ Repair Performed
Plant Yates/ AP-3, A, B, B', and R6 CCR Landfill	September 9, 2021	YGWC-23S	Outer protective cover was damaged and cracked. Structural repairs were completed. This consisted of replacing the pad and protective casing. The well was re-surveyed on October 20, 2021.

Figure 1
Monitoring Well Repair – YGWC-23S

Georgia Power
Plant Yates – Newnan, GA

APPENDIX B

Field Sampling Forms (February and March 2021)

February 2021 Scan Event

February 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 2/08/21 Time: 14:30

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	LaMotte SN 6012-4015
0.0	NTU	0.00	0.00	NA
10.0	NTU	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

February 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 2/09/21 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	LaMotte SN 6012-4015
0.0	NTU	0.00	0.00	NA
10.0	NTU	10.00	10.00	NA

February 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 2/09/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	LaMotte SN 6012-4015
0.0	NTU	0.00	0.00	NA
10.0	NTU	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

February 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 2/10/21 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	6.98	6.98	6.98
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	229	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 2/10/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	6.98	6.98	6.98
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	228	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	NA	0.00	NA
10.0	NTU	NA	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

February 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis

Instrument Calibration

Date: 2/11/21 Time: 7:00

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	6.98	6.98	6.98
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	229	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 2/11/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 513261	SmarTROLL SN 518550	SmarTROLL SN 509072
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	6.98	6.98	6.98
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	228	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 1164-2911	LaMotte SN 6012-4015	Geotech SN 18081847
0.0	NTU	NA	0.00	NA
10.0	NTU	NA	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	2/8/2021
Sampler:	Peter Argyakis
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
PZ-06D	2/8/2021	11:19:00	21.72	134.02	--
YGWA-6S	2/8/2021	11:21:00	17.54	39.87	--
YGWA-6I	2/8/2021	11:22:00	18.90	69.03	--
YGWA-17S	2/8/2021	11:25:00	11.85	39.85	--
YGWA-18S	2/8/2021	11:34:00	19.55	39.97	--
YGWA-18I	2/8/2021	11:38:00	22.90	79.97	--
PZ-48	2/8/2021	11:50:00	19.74	58.73	--
YGWC-49	2/8/2021	11:55:00	31.72	78.53	--
PZ-35	2/8/2021	12:01:00	11.25	50.01	--
YAMW-1	2/8/2021	12:02:00	11.07	69.93	--
YGWC-24SA	2/8/2021	12:35:00	28.00	57.00	--
PZ-24IA	2/8/2021	12:47:00	28.25	89.85	--
YGWA-20S	2/8/2021	13:22:00	11.19	29.52	--
YGWA-21I	2/8/2021	13:24:00	31.21	79.90	--
PZ-05S	2/8/2021	13:40:00	18.69	41.94	--
YGWA-5I	2/8/2021	13:43:00	18.75	58.94	--
YGWA-5D	2/8/2021	13:44:00	21.77	129.13	--
PZ-04S	2/8/2021	13:47:00	24.13	33.33	--
YGWA-4I	2/8/2021	13:49:00	22.62	48.81	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA R6 CCR Landfill
Date:	2/8/2021
Sampler:	Peter Argyakis
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWC-42	2/8/2021	09:28:00	28.19	59.76	--
YAMW-3	2/8/2021	09:32:00	35.46	91.44	--
PZ-51	2/8/2021	09:40:00	7.36	36.00	--
YGWC-43	2/8/2021	09:46:00	16.36	79.66	--
YAMW-4	2/8/2021	09:55:00	31.09	96.55	--
YGWC-41	2/8/2021	09:57:00	27.44	67.32	--
YGWA-40	2/8/2021	10:02:00	22.93	48.23	--
PZ-37	2/8/2021	10:08:00	12.55	49.78	--
YGWA-39	2/8/2021	10:16:00	17.37	68.59	--
YAMW-5	2/8/2021	10:27:00	13.48	90.34	--
YGWC-38	2/8/2021	10:29:00	30.75	50.59	--
YAMW-2	2/8/2021	10:49:00	20.79	46.48	--
YGWC-36A	2/8/2021	12:05:00	9.58	51.20	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	2/8/2021
Sampler:	Katie Pupkiewicz
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWC-23S	2/8/2021	10:42:00	16.95	38.91	Well casing damaged at bottom

Groundwater Sampling Form

Project Number	30053437	**Well ID**	PZ-37			**Date**	02/09/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	Cloudy 55°F			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	39.28	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.56	**Total Depth (ft-bmp)**	49.78	**Water Column(ft)**	37.22	**Gallons in Well**	6.05
MP Elevation	760.78	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:30	**Well Volumes Purged**	0.26	**Sample ID**	PZ-37(020921)	**Sampled by**	Katie Pupkiewicz
Purge Start	08:53	**Gallons Purged**	1.59	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:25						

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)
08:53:22	00:00	200	12.91	6.79	1268.16	0.68	5.53	15.7	176.21
08:58:22	05:00	200	12.92	5.81	1252.83	0.09	0.87	16.4	175.01
09:03:22	10:00	200	12.91	5.64	1245.70	0.00	1.61	16.6	173.36
09:08:22	15:00	200	12.92	5.58	1252.33	94.66	4.36	16.4	172.90
09:13:22	20:00	200	12.92	5.51	1269.87	0.10	0.63	16.5	173.59
09:18:22	25:00	200	12.92	5.45	1280.76	0.17	0.76	16.6	173.42
09:23:22	30:00	200	12.92	5.42	1286.39	0.20	0.88	16.8	173.47

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: La Motteturbidity readings in five minute intervals in accordance with the VuSitu purge log
1.16
0.85
1.14
0.62
0.73
0.67
0.52

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Well Locked at Arrival:
Condition of Well:
Well Locked at Departure:
Well Completion: NA
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-4I			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	52.7 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	38.51	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	22.61	**Total Depth (ft-bmp)**	48.81	**Water Column(ft)**	26.2	**Gallons in Well**	4.26
MP Elevation	784.21	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:33	**Well Volumes Purged**	0.35	**Sample ID**	YGWA-4I	**Sampled by**	Becky Steever
Purge Start	09:00	**Gallons Purged**	1.49	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:47						

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)
09:00:56	00:00	125	24.82	7.92	1.21	0.00	10.79	12.4	231.36
09:05:56	05:00	125	24.83	6.17	0.07	0.31	10.24	13.0	221.85
09:10:56	10:00	125	24.84	6.44	0.14	0.05	10.45	13.0	228.38
09:15:56	15:00	125	24.85	6.55	0.25	0.07	10.39	13.1	230.12
09:20:56	20:00	125	24.86	6.13	122.92	1.15	2.87	14.5	223.37
09:25:56	25:00	125	24.9	6.15	155.73	1.25	2.28	14.8	223.99
09:30:56	30:00	125	24.91	6.13	151.54	1.37	2.38	14.8	224.27
09:35:56	35:00	125	24.93	6.10	147.32	1.27	2.55	14.8	224.72
09:40:56	40:00	125	24.93	6.09	143.34	0.97	2.70	14.9	225.06
09:45:56	45:00	125	24.93	6.06	140.86	0.87	2.85	14.9	225.33

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Fluoride	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity readings taken concurrently on stand alone meter at each five minute interval: 0.83, 0.26, 0.55, 1.32, 1.22, 01.31, 1.26, 1.01, & 0.98 NTU.

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWA-17S			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	62.2 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)**	29.65	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.83	**Total Depth (ft-bmp)**	39.85	**Water Column(ft)**	28.02	**Gallons in Well**	4.55
MP Elevation	783.05	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:15	**Well Volumes Purged**	0.29	**Sample ID**	YGWA-17S	**Sampled by**	Becky Steever
Purge Start	10:40	**Gallons Purged**	1.32	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:12						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
10:40:27	00:00	160	11.83	6.13	0.07	0.04	10.54	13.3	202.00
10:45:27	05:00	160	12.39	5.62	70.73	0.97	7.65	16.2	210.13
10:50:27	10:00	160	12.39	5.61	70.17	3.48	7.46	16.5	214.90
10:55:27	15:00	160	12.4	5.61	61.83	6.45	7.18	16.6	219.69
11:00:27	20:00	160	12.41	5.63	85.95	3.30	2.03	17.0	219.29
11:05:27	25:00	160	12.41	5.63	88.65	3.77	1.96	17.1	220.36
11:10:27	30:00	160	12.41	5.62	89.22	3.29	1.92	17.0	220.37

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken concurrently on stand alone meter at each five minute interval. All readings below 5.0 NTU. Reading at time of sampling 0.43 NTU

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____

Condition of Well: _____

Well Completion: NA

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-18S			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	60.6 degrees F and Cloudy. The wind is blowing N/NW at 3.4 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)	19.51	**Total Depth (ft-bmp)**	39.97	**Water Column(ft)**	20.46	**Gallons in Well**	3.32
MP Elevation	790.57	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:25	**Well Volumes Purged**	0.47	**Sample ID**	YGWA-18S	**Sampled by**	Becky Steever
Purge Start	12:47	**Gallons Purged**	1.56	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:23						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:47:58	00:00	200	19.51	6.15	0.06	9.58	8.01	22.6	186.45
12:52:58	05:00	200	20.42	5.52	59.53	15.02	4.85	18.4	191.97
12:57:58	10:00	155	20.58	5.42	62.74	12.20	2.19	18.8	204.03
13:02:58	15:00	155	20.32	5.40	62.65	6.77	1.77	19.2	208.00
13:07:58	20:00	155	20.35	5.38	63.23	5.86	1.37	18.8	213.62
13:12:58	25:00	155	20.37	5.40	64.32	7.06	1.34	19.5	216.24
13:17:58	30:00	155	20.38	5.42	64.09	4.89	1.27	20.4	217.41
13:22:58	35:00	155	20.38	5.43	64.60	5.84	1.14	21.5	219.24

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken concurrently on stand alone meter at each five minute interval: 5.63, 6.77, 6.32, 5.56,4.88, 7.44, 3.22, 4.76

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____

Condition of Well: _____

Well Completion: NA

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-18I			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	67.6 degrees F and Cloudy. The wind is blowing S 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)	22.85	**Total Depth (ft-bmp)**	79.97	**Water Column(ft)**	57.12	**Gallons in Well**	9.28
MP Elevation	790.57	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:20	**Well Volumes Purged**	0.13	**Sample ID**	YGWA-18I	**Sampled by**	Becky Steever
Purge Start	13:55	**Gallons Purged**	1.19	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:18						

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)
13:55:53	00:00	200	23.01	6.75	102.78	0.51	7.78	17.6	215.66
14:00:53	05:00	200	23.04	6.27	108.41	1.50	3.56	18.7	222.91
14:05:53	10:00	200	23.08	6.15	98.29	1.76	3.67	18.5	225.72
14:10:53	15:00	200	23.09	6.13	96.33	0.44	3.76	18.4	225.49
14:15:53	20:00	200	23.11	6.12	98.09	0.95	3.81	18.2	225.10

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time=NTU)
1434=3.22; 1439=3.67; 1444=4.03; 1449=3.99; 1454=3.71

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Well Locked at Arrival:
Condition of Well:
Well Locked at Departure:
Well Completion: NA
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWC-49			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	66.7 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)**	68.03	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	32.72	**Total Depth (ft-bmp)**	78.53	**Water Column(ft)**	45.81	**Gallons in Well**	7.44
MP Elevation	782.73	**Pump Intake (ft-bmp)**	73	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:15	**Well Volumes Purged**	0.10	**Sample ID**	YGWC-49	**Sampled by**	Becky Steever
Purge Start	14:53	**Gallons Purged**	0.77	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:10						

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)
14:53:40	00:00	160	33.03	5.97	248.54	0.79	3.98	18.7	-15.60
14:58:40	05:00	160	33.28	5.84	243.89	0.48	2.39	18.6	52.23
15:03:40	10:00	160	33.37	5.81	246.84	0.44	2.29	18.4	84.56
15:08:40	15:00	160	33.41	5.79	249.59	0.39	2.37	18.4	103.63

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time, NTU)
1453, 1.20
1458, 0.88
1503, 0.65
1508, 0.59

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWA-21I			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	67.6 degrees F and Cloudy. The wind is blowing S 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)	32	**Total Depth (ft-bmp)**	79.9	**Water Column(ft)**	47.9	**Gallons in Well**	7.78
MP Elevation	783.7	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:50	**Well Volumes Purged**	0.08	**Sample ID**	YGWA-21I	**Sampled by**	Becky Steever
Purge Start	15:48	**Gallons Purged**	0.66	**Replicate/ Code No.**		**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)
15:48:26	00:00	200	32	7.19	157.96	8.15	8.83	17.9	83.27
15:53:26	05:00	100	35.55	6.95	167.86	0.38	2.83	17.9	-53.34
15:58:26	10:00	100	35.43	6.92	166.84	0.92	1.21	17.9	-58.74
16:03:26	15:00	100	35.33	6.95	160.22	0.33	9.47	17.8	-53.31

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time=NTU)
1548=1.26, 1553=0.56, 1558=0.49, 1603=0.44

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053437	**Well ID**	YGWA-39			**Date**	02/10/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Fog/Mist. The wind is blowing E/NE at 3.4 mph. 54°			
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)	17.28	**Total Depth (ft-bmp)**	68.59	**Water Column(ft)**	51.31	**Gallons in Well**	8.34
MP Elevation	818.19	**Pump Intake (ft-bmp)**	63	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:30	**Well Volumes Purged**	0.14	**Sample ID**	YGWA-39	**Sampled by**	Katie Pupkiewicz
Purge Start	08:58	**Gallons Purged**	1.19	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:26						

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)
08:58:13	00:00	160	17.57	9.40	185.55	0.20	5.25	14.9	117.79
09:03:13	05:00	160	17.59	7.91	262.94	0.05	0.92	16.2	98.60
09:08:13	10:00	160	17.65	6.12	270.94	0.05	0.23	16.7	92.74
09:13:13	15:00	160	17.66	5.88	272.85	0.10	0.16	16.8	92.57
09:18:13	20:00	160	17.66	5.82	268.67	0.12	0.12	17.0	92.67
09:23:13	25:00	160	17.67	5.80	267.91	0.16	0.13	17.2	92.12

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log
1.08
5.79
0.45
0.32
3.92
0.73

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWA-40			**Date**	02/10/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	Sunny and 65°F			
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)	22.92	**Total Depth (ft-bmp)**	48.23	**Water Column(ft)**	25.31	**Gallons in Well**	4.11
MP Elevation	815.73	**Pump Intake (ft-bmp)**	42	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:50	**Well Volumes Purged**	0.48	**Sample ID**	YGWA-39	**Sampled by**	Katie Pupkiewicz
Purge Start	10:10	**Gallons Purged**	1.98	**Replicate/ Code No.**	FB-01(021021)	**Color**	Clear
Purge End	10:46						

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)
10:10:23	00:00	200	23.52	6.13	84.39	0.27	8.94	16.9	94.30
10:15:23	05:00	200	23.71	5.46	80.20	0.17	8.29	18.3	86.49
10:20:23	10:00	200	23.7	5.37	78.37	0.17	8.36	18.5	91.07
10:25:23	15:00	200	23.68	5.30	80.89	0.22	8.25	18.2	94.18
10:30:23	20:00	200	23.68	5.22	81.73	0.25	8.18	17.9	121.25
10:35:23	25:00	200	23.68	5.16	119.86	0.23	6.14	17.5	121.99
10:40:23	30:00	200	23.68	5.13	119.19	0.21	4.11	17.5	125.84
10:45:23	35:00	200	23.67	5.19	118.93	0.23	4.10	17.6	123.45

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log
0.33
0.04
0.09
0.07
0.00
0.24
0.20
0.24

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: _____

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWC-41			**Date**	02/10/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	68.0 degrees F and Clear. The wind is blowing E/SE at 8.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	56.82	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.44	**Total Depth (ft-bmp)**	67.32	**Water Column(ft)**	39.88	**Gallons in Well**	6.48
MP Elevation	803.92	**Pump Intake (ft-bmp)**	62	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:25	**Well Volumes Purged**	0.25	**Sample ID**	YGWC-41	**Sampled by**	Katie Pupkiewicz
Purge Start	12:47	**Gallons Purged**	1.61	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:23						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:47:49	00:00	160	28.25	5.25	345.00	0.38	5.72	19.2	125.48
12:52:49	05:00	160	28.39	4.97	290.67	0.38	4.52	19.7	125.75
12:57:49	10:00	160	28.36	4.96	0.06	0.19	7.80	21.3	131.36
13:02:49	15:00	160	28.39	4.92	250.64	0.42	4.57	20.1	145.89
13:07:49	20:00	160	28.39	4.95	256.65	0.44	4.51	20.7	144.14
13:12:49	25:00	160	28.39	4.96	376.58	0.55	4.61	20.3	159.42
13:17:49	30:00	160	28.39	4.92	382.81	1.01	4.71	19.8	155.83
13:22:49	35:00	160	28.39	4.98	384.33	2.56	4.85	20.5	159.05

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity reading every five minutes in accordance with VuSitu purge log
0.54
0.68
0.59
0.20
0.20
0.09
0.45
0.36

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWC-42			**Date**	02/10/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	69.8 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	49.36	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	28.11	**Total Depth (ft-bmp)**	59.76	**Water Column(ft)**	31.65	**Gallons in Well**	5.14
MP Elevation	797.86	**Pump Intake (ft-bmp)**	55	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:30	**Well Volumes Purged**	0.16	**Sample ID**	YGWC-42	**Sampled by**	Katie Pupkiewicz
Purge Start	14:10	**Gallons Purged**	0.82	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:26						

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)
14:10:02	00:00	120	29.11	5.55	1333.11	2.12	5.11	18.6	157.84
14:15:02	05:00	100	29.95	5.63	1417.90	0.88	1.59	19.1	138.88
14:20:02	10:00	100	30.05	5.62	1413.86	2.37	1.44	19.9	140.09
14:25:02	15:00	100	30.02	5.65	1411.69	3.80	1.43	19.6	142.24
14:30:02	20:00	100	30.02	5.86	0.24	0.28	8.30	22.4	144.37
14:34:49	24:47	100	30.02	5.88	0.06	0.40	8.37	23.0	154.86

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings every five minutes in accordance with VuSitu purge log
0.50
1.57
1.66
1.31

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053437	**Well ID**	PZ-35			**Date**	02/10/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	70.2 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	38.91	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.74	**Total Depth (ft-bmp)**	50.01	**Water Column(ft)**	38.27	**Gallons in Well**	6.22
MP Elevation	743.81	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:15	**Well Volumes Purged**	0.14	**Sample ID**	PZ-35	**Sampled by**	Katie Pupkiewicz
Purge Start	15:57	**Gallons Purged**	0.85	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:13						

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)
15:57:50	00:00	180	11.93	5.83	110.48	1.95	6.68	19.7	139.34
16:02:50	05:00	180	11.93	5.62	107.72	3.18	5.48	19.7	135.59
16:07:50	10:00	180	11.93	5.58	107.24	0.51	5.21	19.5	135.37
16:12:50	15:00	180	11.94	5.53	105.49	1.00	4.92	19.2	138.00

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings every five minutes in accordance with VuSitu purge log
1.60
1.11
1.06
1.05

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-5D			**Date**	02/08/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	59.5 degrees F and Clear. The wind is blowing S/SE at 9.2 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)	22.29	**Total Depth (ft-bmp)**	129.13	**Water Column(ft)**	106.84	**Gallons in Well**	17.36
MP Elevation	784.53	**Pump Intake (ft-bmp)**	124	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:45	**Well Volumes Purged**	0.15	**Sample ID**	YGWA-5D	**Sampled by**	Peter Argyakis
Purge Start	15:51	**Gallons Purged**	2.60	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:41						

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)
15:51:10	00:00	200	22.29	7.86	164.99	296.62	9.59	16.7	-164.27
15:56:10	05:00	200	22.29	7.78	165.22	273.17	9.56	16.4	-187.88
16:01:10	10:00	200	22.29	7.73	173.79	258.87	9.65	15.9	-127.42
16:06:10	15:00	200	22.29	7.71	154.23	239.64	9.71	15.6	-139.89
16:11:10	20:00	200	22.29	7.63	206.52	222.85	9.62	15.2	-139.78
16:16:10	25:00	200	22.29	7.61	178.26	208.31	9.66	15.1	-111.34
16:21:10	30:00	200	22.29	7.62	167.01	196.81	9.65	15.0	-110.68
16:26:10	35:00	200	22.29	7.64	155.65	186.23	9.52	15.0	-114.65
16:31:10	40:00	200	22.29	7.64	148.92	176.24	9.49	15.0	-122.46
16:36:10	45:00	200	22.29	7.65	144.09	166.85	9.50	14.9	-127.04
16:41:10	50:00	200	22.29	7.66	143.98	158.30	9.49	14.8	-129.62

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)
1550: 1.12
1555: 1.13
1600: 1.44
1605: 2.11
1610: 1.51
1615: 1.57
1620: 1.47
1625: 1.19
1630: 1.07
1635: 0.97
1640: 1.05

Well Casing Volume Conversion

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWC-38			**Date**	02/09/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	59.9 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	39.59	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	30.75	**Total Depth (ft-bmp)**	50.59	**Water Column(ft)**	19.84	**Gallons in Well**	3.22
MP Elevation	799.69	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:50	**Well Volumes Purged**	0.18	**Sample ID**	YGWC-38	**Sampled by**	Katie Pupkiewicz
Purge Start	13:31	**Gallons Purged**	0.58	**Replicate/ Code No.**	MS/MSD	**Color**	Clear
Purge End	13:48						

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)
13:31:26	00:00	140	31.3	5.29	961.97	1.26	6.50	20.3	142.48
13:36:26	05:00	100	32.1	5.02	929.66	3.82	4.47	18.5	139.84
13:41:26	10:00	100	32.07	5.02	919.74	1.11	4.29	18.3	139.47
13:46:26	15:00	100	32.05	5.04	920.86	0.69	4.23	18.1	144.02

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings every five minutes in accordance with VuSitu purge log
1.57
2.80
1.70
1.01

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWA-5I			**Date**	02/08/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	59.2 degrees F and Clear. The wind is blowing S/SE at 10.3 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)	18.8	**Total Depth (ft-bmp)**	58.94	**Water Column(ft)**	40.14	**Gallons in Well**	6.52
MP Elevation	784.54	**Pump Intake (ft-bmp)**	53	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:20	**Well Volumes Purged**	0.22	**Sample ID**	YGWA-5I(020821	**Sampled by**	Katie Pupkiewicz
Purge Start	15:47	**Gallons Purged**	1.45	**Replicate/ Code No.**	Dup-01	**Color**	Clear
Purge End	16:15						

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)
15:47:47	00:00	200	19.24	6.88	99.76	0.33	6.11	16.3	198.20
15:52:47	05:00	200	19.24	6.03	96.34	0.12	6.46	16.3	188.16
15:57:47	10:00	200	19.2	5.75	76.12	0.09	6.51	16.3	181.96
16:02:47	15:00	200	19.22	5.70	69.72	0.60	6.47	16.4	179.77
16:07:47	20:00	200	19.22	5.67	67.26	0.74	6.49	16.4	176.42
16:12:47	25:00	200	19.22	5.67	67.27	2.42	6.46	16.4	175.21

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity taken every 5 min in accordance With VuSitu sample troll
1.33
1.60
1.25
0.92
1.40
1.50

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWA-20S			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	68.0 degrees F and Cloudy. The wind is blowing undefined at 0.0 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)	11.27	**Total Depth (ft-bmp)**	29.52	**Water Column(ft)**	18.25	**Gallons in Well**	2.97
MP Elevation	767.12	**Pump Intake (ft-bmp)**	24.5	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:50	**Well Volumes Purged**	0.33	**Sample ID**	YGWA-20S	**Sampled by**	Katie Pupkiewicz
Purge Start	16:26	**Gallons Purged**	0.98	**Replicate/ Code No.**		**Color**	Clear
Purge End	16:46						

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)
16:26:09	00:00	160	11.97	5.96	65.31	19.43	7.76	17.3	61.51
16:31:09	05:00	160	12	5.93	60.57	10.01	7.47	17.1	55.91
16:36:09	10:00	160	12.04	5.90	60.16	3.12	7.42	16.9	58.04
16:41:09	15:00	160	12.05	5.87	59.94	1.91	7.41	16.7	61.08
16:46:09	20:00	160	12.05	5.86	60.08	1.43	7.38	16.7	66.54

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings every five minutes in accordance with VuSitu purge log
13.01
7.41
3.84
2.10
1.95

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053437	**Well ID**	YGWC-23S			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	Cloudy breezy 55°F			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	28.61	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	16.96	**Total Depth (ft-bmp)**	38.91	**Water Column(ft)**	21.95	**Gallons in Well**	3.57
MP Elevation	764.91	**Pump Intake (ft-bmp)**	34	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:10	**Well Volumes Purged**	0.50	**Sample ID**	YGW -23S(020921)	**Sampled by**	Katie Pupkiewicz
Purge Start	10:33	**Gallons Purged**	1.80	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:05						

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)
10:33:25	00:00	210	17.75	5.94	207.22	27.52	8.51	16.7	80.82
10:38:25	05:00	210	17.76	5.73	205.72	17.88	8.22	16.9	90.41
10:43:25	10:00	210	17.77	5.62	200.80	9.98	8.70	17.1	91.95
10:48:25	15:00	210	17.79	5.73	131.25	2.85	7.80	17.2	88.62
10:53:25	20:00	210	17.77	5.64	196.98	1.28	7.84	17.1	88.05
10:58:25	25:00	210	17.8	5.62	195.78	0.59	7.88	17.3	90.60
11:03:25	30:00	210	17.82	5.61	195.48	0.24	7.90	17.4	98.16

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with the VuSitu purge log
12.43
7.01
5.63
2.09
1.13
1.11
0.75

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053437	**Well ID**	YGWC-43			**Date**	02/09/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	66.7 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)**	69.16	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	16.28	**Total Depth (ft-bmp)**	79.66	**Water Column(ft)**	63.38	**Gallons in Well**	10.3
MP Elevation	744.96	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:30	**Well Volumes Purged**	0.07	**Sample ID**	YGWC-43	**Sampled by**	Katie Pupkiewicz
Purge Start	15:09	**Gallons Purged**	0.69	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:26						

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)
15:09:47	00:00	140	16.41	5.82	809.51	3.40	5.57	19.3	43.08
15:14:47	05:00	140	16.45	5.77	898.40	0.56	1.38	18.6	36.52
15:19:47	10:00	140	16.52	5.82	892.29	0.43	0.90	18.2	36.03
15:24:47	15:00	140	16.45	5.86	868.41	0.38	1.20	18.2	36.25

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log
3.92
1.64
0.68
0.77

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA _____ Key Number To Well: NA _____

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YGWC-36A			**Date**	02/10/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	69.8 degrees F and Mostly Cloudy. The wind is blowing S at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	689.7	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	13.43	**Total Depth (ft-bmp)**	51.2	**Water Column(ft)**	37.77	**Gallons in Well**	6.14
MP Elevation	739.61	**Pump Intake (ft-bmp)**	48	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:30	**Well Volumes Purged**	0.22	**Sample ID**	YGWC-36A	**Sampled by**	Peter Argyakis
Purge Start	13:56	**Gallons Purged**	1.32	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:27						

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)
13:56:54	00:00	150	13.43	5.85	111.21	67.53	8.56	19.1	133.62
14:01:54	05:00	150	13.5	5.99	111.32	27.91	8.38	20.1	131.77
14:06:54	10:00	150	13.63	6.13	111.86	25.95	8.43	20.9	125.34
14:11:54	15:00	150	13.75	6.20	112.17	26.85	8.44	21.6	122.82
14:16:54	20:00	150	13.9	6.25	112.21	18.93	8.44	22.3	121.99
14:21:54	25:00	150	13.98	6.31	112.81	20.67	8.50	23.1	120.45
14:26:54	30:00	150	14.11	6.31	112.80	18.91	8.50	23.8	121.60

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3

Comments:

LaMotte turbidity readings (time:NTU)
1357: 11.4
1402: 7.33
1407: 5.94
1412: 4.21
1417: 4.87
1422: 4.56
1427: 3.09

Sample sightly more turbid compared to low-flow purge

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____

Condition of Well: _____

Well Completion: NA

Well Locked at Arrival: _____

Well Locked at Departure: _____

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YAMW-5			**Date**	02/09/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	Cold, dry			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	80.3	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	13.98	**Total Depth (ft-bmp)**	90.34	**Water Column(ft)**	76.36	**Gallons in Well**	12.41
MP Elevation	788.9	**Pump Intake (ft-bmp)**	85	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:45	**Well Volumes Purged**	0.14	**Sample ID**	YAMW-5	**Sampled by**	Peter Argyakis
Purge Start	09:03	**Gallons Purged**	1.78	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:43						

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)
09:03:44	00:00	250	12.98	5.37	0.07	43.49	10.52	11.9	223.76
09:08:44	05:00	200	13.9	5.32	0.07	55.09	10.21	12.5	220.41
09:13:44	10:00	150	14.47	5.36	0.07	67.25	10.04	12.7	218.76
09:18:44	15:00	150	14.72	5.33	0.07	80.70	9.89	13.0	217.80
09:23:44	20:00	150	14.88	5.34	0.07	83.16	9.79	13.2	216.61
09:28:44	25:00	150	14.96	5.66	0.07	108.44	9.86	13.5	216.52
09:33:44	30:00	150	15.05	5.34	0.07	112.43	9.78	13.8	214.02
09:38:44	35:00	150	15.14	5.34	0.07	130.82	9.72	14.1	214.52
09:43:44	40:00	150	15.14	5.34	0.07	143.48	9.58	14.3	213.19

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments:

LaMotte turbidity readings (time:NTU)
0903: 3.28
0908: 2.67
0913: 2.54
0918: 2.15
0923: 2.18
0928: 1.96
0933: 2.08
0938: 2.29
0943: 2.12

Last depth to water: 15.18

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

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YAMW-4			**Date**	02/09/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	Sunny, dry			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	86.59	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.98	**Total Depth (ft-bmp)**	96.55	**Water Column(ft)**	64.57	**Gallons in Well**	10.49
MP Elevation	805.59	**Pump Intake (ft-bmp)**	90	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:20	**Well Volumes Purged**	0.21	**Sample ID**	YAMW-4	**Sampled by**	Peter Argyakis
Purge Start	10:24	**Gallons Purged**	2.18	**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)
10:24:43	00:00	150	31.98	5.60	0.07	194.37	10.17	13.1	185.76
10:29:43	05:00	150	32.15	6.88	0.07	110.70	9.78	14.0	176.61
10:34:43	10:00	150	32.36	6.88	0.07	102.23	9.75	14.4	170.84
10:39:43	15:00	150	32.48	6.90	0.07	103.96	9.59	14.3	152.16
10:44:43	20:00	150	32.59	6.93	0.30	105.82	9.57	14.3	134.78
10:49:43	25:00	150	32.71	6.89	446.03	0.00	9.20	15.4	75.09
10:54:43	30:00	150	32.76	6.88	437.06	0.00	9.19	15.4	56.75
10:59:43	35:00	150	32.83	6.89	417.28	107.16	9.25	15.3	44.68
11:04:43	40:00	150	33.01	6.78	474.74	1.36	6.48	16.9	-6.45
11:09:43	45:00	150	33.09	6.91	471.10	0.00	3.10	15.8	-9.92
11:14:43	50:00	150	33.15	6.94	470.46	0.00	3.52	15.1	-1.65
11:19:43	55:00	150	33.15	6.96	470.22	0.00	3.96	14.7	-3.43

Constituent Sampled	Container	Number	Preservative
Fluoride	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Comments: LaMotte turbidity readings (time:NTU)
1024: 1.31
1029: 1.99
1034: 1.78
1039: 1.47
1044: 2.02
1049: 1.77
1054: 1.50
1059: 1.86
1104: 1.42
1109: 1.58
1114: 1.75
1119: 2.03

Last depth to water: 33.22

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:		Well Locked at Arrival:	
Condition of Well:		Well Locked at Departure:	
Well Completion:	NA	Key Number To Well:	NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YAMW-2			**Date**	02/09/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	57.4 degrees F and Cloudy. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	36.44	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	20.5	**Total Depth (ft-bmp)**	46.48	**Water Column(ft)**	25.98	**Gallons in Well**	4.22
MP Elevation	781.04	**Pump Intake (ft-bmp)**	41	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:45	**Well Volumes Purged**	0.19	**Sample ID**	YMWA-2	**Sampled by**	Peter Argyakis
Purge Start	12:21	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:41						

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)
12:21:40	00:00	150	20.5	5.75	0.00	0.55	9.19	17.6	127.23
12:26:40	05:00	150	20.63	5.90	23.25	41.93	9.11	17.3	113.65
12:31:40	10:00	150	20.8	5.80	65.07	83.36	7.56	17.9	125.49
12:36:40	15:00	150	20.88	5.78	65.62	68.30	7.49	18.7	130.35
12:41:40	20:00	150	20.93	5.81	67.95	83.32	7.34	20.4	131.93

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)
1221: 3.92
1226: 3.46
1231: 2.85
1236: 2.51
1241: 2.18

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YAMW-1			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	63.9 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)**	59.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.63	**Total Depth (ft-bmp)**	69.93	**Water Column(ft)**	57.3	**Gallons in Well**	9.31
MP Elevation	743.83	**Pump Intake (ft-bmp)**	65	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:10	**Well Volumes Purged**	0.08	**Sample ID**	YAMW-1	**Sampled by**	Peter Argyakis
Purge Start	13:53	**Gallons Purged**	0.73	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:08						

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)
13:53:02	00:00	250	12.63	5.49	0.06	0.00	8.80	20.7	129.48
13:58:02	05:00	150	12.99	6.41	183.45	0.00	2.98	19.1	126.64
14:03:02	10:00	150	13.18	6.42	183.35	0.00	2.91	19.1	128.01
14:08:02	15:00	150	13.23	6.42	183.16	0.00	3.21	19.0	128.31

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Fluoride	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity reading (time:NTU)
1353: 2.42
1358: 1.48
1403: 1.89
1409: 1.74

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YGWC-24SA			**Date**	02/09/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	66.7 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)**	47	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	28.52	**Total Depth (ft-bmp)**	57	**Water Column(ft)**	28.48	**Gallons in Well**	4.63
MP Elevation	765	**Pump Intake (ft-bmp)**	92	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:10	**Well Volumes Purged**	0.51	**Sample ID**	YGWC-24SA	**Sampled by**	Peter Argyakis
Purge Start	15:09	**Gallons Purged**	2.38	**Replicate/ Code No.**	DUP-2	**Color**	Clear
Purge End	16:04						

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)
15:09:39	00:00	300	28.52	5.67	0.06	0.00	8.41	22.2	281.84
15:14:39	05:00	150	28.97	6.17	53.00	0.00	9.20	20.1	228.97
15:19:39	10:00	150	29.03	6.13	42.94	0.00	9.02	20.2	228.78
15:24:39	15:00	150	29.08	6.09	35.31	0.00	8.99	19.9	229.72
15:29:39	20:00	150	29.11	6.06	29.35	0.00	8.89	20.4	231.59
15:34:39	25:00	150	29.15	6.07	32.41	0.00	8.68	20.6	232.71
15:39:39	30:00	150	29.16	6.11	32.39	0.00	8.58	21.0	232.63
15:44:39	35:00	150	29.19	5.74	102.62	0.00	8.29	19.9	227.52
15:49:39	40:00	150	29.24	5.68	104.53	0.00	8.16	19.9	215.83
15:54:39	45:00	150	29.26	5.70	104.97	0.00	8.16	20.2	207.74
15:59:39	50:00	150	29.3	5.69	105.75	0.00	8.12	20.4	205.13
16:04:39	55:00	150	29.34	5.69	105.68	0.00	8.10	20.5	203.62

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Fluoride	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: Lamotte turbidity reading (time:NTU)
1509: 1.84
1514: 1.03
1519: 1.68
1524: 1.33
1529: 1.74
1534: 1.50
1539: 1.29
1544: 0.88
1549: 1.39
1554: 1.02
1559: 1.19
1604: 1.55

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-3
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	09:32:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	PZ-51
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	09:40:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-43
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	09:46:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-4
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	09:55:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-41
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	09:57:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-40
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	10:02:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	PZ-37
Person Gauging:	Peter Argyakis
Date:	2/8/2021
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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-39
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	10:16:00

			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:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-5
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	10:27:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-38
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	10:29:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-2
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	10:49:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-23S
Person Gauging:	Katie Pupkiewicz
Date:	2/8/2021
Time:	10:42:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-06D
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:19:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-6S
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:21:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-6I
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:22:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-17S
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:25:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18S
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:34:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18I
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:38:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-48
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:50:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-49
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	11:55:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-35
Person Gauging:	Peter Argyakis
Date:	2/8/2021
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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YAMW-1
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	12:02:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-36A
Person Gauging:	Peter Argyakis
Date:	2/8/2021
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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-24SA
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	12:35:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-24IA
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	12:47:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-20S
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	13:22:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-21I
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	13:24:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-05S
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	13:40:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5I
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	13:43:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5D
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	13:44:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-04S
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	13:47:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-4I
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	13:49:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-42
Person Gauging:	Peter Argyakis
Date:	2/8/2021
Time:	09:28:00

			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:				

March 2021 Event

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	3/2/2021
Sampler:	Peter Argyakis
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWA-5D	3/2/2021	08:05:00	21.88	129.13	--
YGWA-5I	3/2/2021	08:09:00	18.19	58.94	--
PZ-05S	3/2/2021	08:11:00	18.14	41.94	--
PZ-04S	3/2/2021	08:19:00	23.74	33.33	--
YGWA-4I	3/2/2021	08:21:00	22.12	48.81	--
YGWA-20S	3/2/2021	08:32:00	11.28	29.52	--
YGWA-21I	3/2/2021	08:39:00	31.10	79.90	--
YGWA-6I	3/2/2021	09:03:00	18.25	69.03	--
YGWA-6S	3/2/2021	09:05:00	17.87	39.87	--
PZ-06D	3/2/2021	09:07:00	21.22	134.02	--
PZ-48	3/2/2021	09:11:00	19.35	58.73	--
YGWC-49	3/2/2021	09:18:00	31.50	78.53	--
PZ-24IA	3/2/2021	09:27:00	27.68	89.85	--
YGWC-24SA	3/2/2021	09:29:00	27.45	57.00	--
YAMW-1	3/2/2021	09:31:00	10.80	69.93	--
PZ-35	3/2/2021	09:35:00	11.14	50.01	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA R6 CCR Landfill
Date:	3/2/2021
Sampler:	Katie Pupkiewicz
Equipment:	--

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YAMW-5	3/2/2021	08:40:00	13.03	90.34	--
YGWC-38	3/2/2021	08:43:00	30.42	50.59	--
PZ-37	3/2/2021	08:49:00	11.93	49.78	--
YGWA-39	3/2/2021	08:58:00	16.66	68.59	--
YGWA-40	3/2/2021	09:05:00	22.39	48.23	--
YAMW-4	3/2/2021	09:09:00	30.32	96.55	--
YGWC-41	3/2/2021	09:10:00	26.88	67.32	--
YAMW-2	3/2/2021	09:15:00	19.75	46.48	--
YAMW-3	3/2/2021	09:25:00	34.58	91.44	--
YGWC-42	3/2/2021	09:26:00	27.54	59.76	--
PZ-51	3/2/2021	09:33:00	6.98	36.00	--
YGWC-43	3/2/2021	09:35:00	16.15	79.66	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA R6 CCR Landfill
Date:	3/2/2021
Sampler:	Peter Argyakis
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWC-36A	3/2/2021	09:37:00	10.02	51.20	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	3/2/2021
Sampler:	Katie Pupkiewicz
Equipment:	--

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWA-18S	3/2/2021	08:16:00	18.94	39.97	--
YGWA-18I	3/2/2021	08:17:00	22.41	79.97	--
YGWA-17S	3/2/2021	08:24:00	11.38	39.85	--
YGWC-23S	3/2/2021	08:52:00	16.59	38.91	--

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/01/21 Time: 11:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	235.4	235.4	235.4	235.4	NA

.

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/02/21 Time: 10:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/03/21 Time: 07:45

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Date: 3/03/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	NA
10.0	NTU	10.00	10.00	10.00	NA

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

March 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever/Katie Pupkiewicz/Peter Argyrakis/Jake Swanson

Instrument Calibration

Date: 3/04/21 Time: 08:00

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Date: 3/04/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 518784	SmarTROLL SN 613960	SmarTROLL SN 532229	SmarTROLL SN 519017
DO	% saturation	100	100	100	100	NA
Conductivity	us/cm	8000	8000	8000	8000	NA
pH	S.U.	4.00	4.00	4.00	4.00	NA
pH	S.U.	7.00	7.00	7.00	7.00	NA
pH	S.U.	10.00	10.00	10.00	10.00	NA
ORP	mV	232.0	232.0	232.0	232.0	NA

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219	LaMotte SN 1143-1319
0.0	NTU	0.00	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-17S			**Date**	03/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	53.6 degrees F and Clear. The wind is blowing N at 9.2 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)	11.44	**Total Depth (ft-bmp)**	39.85	**Water Column(ft)**	28.41	**Gallons in Well**	4.62
MP Elevation	783.05	**Pump Intake (ft-bmp)**	34	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:20	**Well Volumes Purged**	0.19	**Sample ID**	YGWA-17S	**Sampled by**	Jake Swanson
Purge Start	11:40	**Gallons Purged**	0.86	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:15						

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)
11:40:19	00:00	100	11.44	5.98	123.43	1.65	6.24	17.0	201.80
11:42:43	02:24	100	11.65	5.75	107.75	11.48	5.50	17.0	272.02
11:47:43	07:24	100	11.65	5.58	97.19	23.84	3.89	16.9	249.22
11:52:43	12:24	100	11.65	5.54	95.43	17.22	2.87	16.7	245.54
11:57:43	17:24	100	11.65	5.53	97.11	9.17	2.66	16.4	243.19
12:02:43	22:24	100	11.65	5.52	97.48	5.24	2.45	16.4	242.51
12:07:43	27:24	100	11.65	5.52	97.19	4.06	2.44	16.3	243.58
12:12:43	32:24	100	11.65	5.52	96.78	4.65	2.40	16.3	244.61

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity reading (elapsed time=NTU): 22:24 = 4.22, 27:24 = 2.39, 32:24 = 1.89

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YGWA-5I			**Date**	03/02/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	45.5 degrees F and Light Rain. The wind is blowing E at 5.8 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)	18.21	**Total Depth (ft-bmp)**	58.94	**Water Column(ft)**	40.73	**Gallons in Well**	6.62
MP Elevation	784.54	**Pump Intake (ft-bmp)**	53	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:05	**Well Volumes Purged**	0.30	**Sample ID**	YGWA-5I	**Sampled by**	Peter Argyakis
Purge Start	13:30	**Gallons Purged**	1.98	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:01						

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)
13:30:52	00:00	250	18.21	5.91	96.12	0.42	6.46	17.0	182.12
13:35:52	05:00	250	18.26	5.72	95.57	0.45	6.33	16.4	212.16
13:40:52	10:00	250	18.33	5.64	96.65	1.37	6.46	15.8	226.13
13:45:52	15:00	250	18.4	5.61	97.09	1.04	6.51	15.7	232.09
13:50:52	20:00	250	18.42	5.61	96.00	0.51	6.50	15.7	240.81
13:55:52	25:00	250	18.49	5.62	96.03	0.44	6.73	15.6	244.63
14:00:52	30:00	250	18.53	5.63	96.06	0.24	6.92	15.2	245.00

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	500 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None

Comments: LaMotte turbidity reading (time:NTU)
1331: 1.65
1336: 0.68
1341: 1.15
1346: 0.77
1351: 1.04
1356: 0.67
1401: 0.88

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YGWA-20S			**Date**	03/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	44.1 degrees F and Mostly Cloudy. The wind is blowing N at 8.1 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)	11.21	**Total Depth (ft-bmp)**	29.52	**Water Column(ft)**	18.31	**Gallons in Well**	2.98
MP Elevation	767.12	**Pump Intake (ft-bmp)**	24.5	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:40	**Well Volumes Purged**	0.58	**Sample ID**	YGWA-20S	**Sampled by**	Peter Argyakis
Purge Start	09:07	**Gallons Purged**	1.72	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:37						

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)
09:07:25	00:00	200	11.21	7.31	103.51	4.83	10.44	13.6	96.66
09:12:25	05:00	200	11.27	5.93	74.72	10.12	8.33	14.5	204.04
09:17:25	10:00	200	11.29	5.83	62.58	7.30	8.03	14.3	224.31
09:22:25	15:00	200	11.3	5.82	60.16	4.38	7.92	14.2	227.98
09:27:25	20:00	200	11.3	5.80	58.49	3.64	7.97	14.1	238.50
09:32:25	25:00	200	11.32	5.83	57.97	2.75	7.91	13.9	238.95
09:37:25	30:00	200	11.33	5.89	57.90	2.91	7.89	13.8	241.09

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
Mercury,Metals	250 mL Plastic	1	HNO3
RAD Chem	500 mL Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)
0907: 4.28
0912: 3.73
0917: 2.81
0922: 3.00
0927: 2.68
0932: 2.76
0937: 2.44

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	PZ-35			**Date**	03/04/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	70.3 degrees F and Clear. The wind is blowing N at 11.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	38.91	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.1	**Total Depth (ft-bmp)**	50.01	**Water Column(ft)**	38.91	**Gallons in Well**	6.32
MP Elevation	743.81	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:30	**Well Volumes Purged**	0.18	**Sample ID**	PZ-35	**Sampled by**	Peter Argyakis
Purge Start	15:03	**Gallons Purged**	1.14	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:20						

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)
15:03:06	00:00	150	11.1	6.02	0.05	6.22	7.92	26.0	178.05
15:08:06	05:00	150	11.1	5.66	111.72	2.49	6.39	24.9	220.96
15:13:06	10:00	150	11.1	5.64	110.65	2.80	5.91	25.7	227.79
15:18:06	15:00	150	11.1	5.62	107.74	8.17	5.78	26.0	231.44
15:23:06	20:00	150	11.1	5.62	106.49	15.26	5.65	26.4	238.38
15:28:06	25:00	150	11.1	5.64	104.50	2.21	5.57	27.0	234.50

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Mercury,Metals	250 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

Comments: LaMotte turbidity reading (time:NTU)
1503: 3.45
1508: 4.09
1513: 2.72
1518: 1.84
1523: 1.53
1528: 1.44

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-18S			**Date**	03/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	59.0 degrees F and Clear. The wind is blowing N at 10.3 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)	18.89	**Total Depth (ft-bmp)**	39.97	**Water Column(ft)**	21.08	**Gallons in Well**	3.43
MP Elevation	790.57	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:50	**Well Volumes Purged**	0.19	**Sample ID**	YGWA-18S	**Sampled by**	Jake Swanson
Purge Start	13:14	**Gallons Purged**	0.66	**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)
13:14:02	00:00	100	18.89	5.74	100.59	13.67	6.07	17.8	211.21
13:19:02	05:00	100	19.5	5.42	78.24	19.66	3.55	19.8	204.88
13:24:02	10:00	100	19.52	5.47	87.48	9.15	3.61	21.1	200.16
13:29:02	15:00	100	19.54	5.41	77.03	2.92	3.71	20.0	203.74

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity reading below 5.0 NTU at time of sampling

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YAMW-1			**Date**	03/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	64.0 degrees F and Clear. The wind is blowing NW at 5.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	59.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	10.98	**Total Depth (ft-bmp)**	69.93	**Water Column(ft)**	58.95	**Gallons in Well**	9.58
MP Elevation	743.83	**Pump Intake (ft-bmp)**	65	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:15	**Well Volumes Purged**	0.11	**Sample ID**	YAMW-1	**Sampled by**	Peter Argyakis
Purge Start	14:42	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:12						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
14:42:21	00:00	200	10.98	6.51	126.29	2.49	8.23	19.7	220.69
14:47:21	05:00	100	11.23	6.47	128.90	2.27	7.64	20.5	208.16
14:52:21	10:00	100	11.27	6.51	137.25	0.92	6.86	20.7	201.71
14:57:21	15:00	100	11.4	6.51	154.98	0.67	5.52	20.8	198.37
15:02:21	20:00	100	11.49	6.54	169.72	0.67	4.38	21.2	193.24
15:07:21	25:00	100	11.52	6.54	171.24	0.41	4.22	22.1	190.38
15:12:21	30:00	100	11.54	6.54	172.50	0.74	4.21	23.2	189.22

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	SO4
Mercury,Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3

Comments: LaMotte turbidity readings (time:NTU)
1442: 1.38
1447: 0.84
1452: 0.67
1457: 1.15
1502: 1.58
1507: 2.03
1512: 1.10

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YGWA-5D			**Date**	03/02/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	Cloudy			
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)	21.95	**Total Depth (ft-bmp)**	129.13	**Water Column(ft)**	107.18	**Gallons in Well**	17.42
MP Elevation	784.53	**Pump Intake (ft-bmp)**	124	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:40	**Well Volumes Purged**	0.02	**Sample ID**	YGWA-5D	**Sampled by**	Peter Argyakis
Purge Start	14:25	**Gallons Purged**	0.26	**Replicate/ Code No.**	DUP-1	**Color**	Clear
Purge End	14:35						

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)
14:25:44	00:00	100	21.95	7.12	221.71	0.20	7.08	12.2	-68.91
14:30:44	05:00	100	21.95	7.14	221.80	0.17	6.42	12.2	-76.27
14:35:44	10:00	100	21.95	7.15	222.28	0.17	5.33	12.2	-76.29

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)
1425: 3.09
1430: 3.31
1435: 1.72

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Well Locked at Arrival:
Condition of Well:
Well Locked at Departure:
Well Completion: NA
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWC-23S			**Date**	03/04/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	66.2 degrees F and Clear. The wind is blowing N at 13.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	28.61	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	16.49	**Total Depth (ft-bmp)**	38.91	**Water Column(ft)**	22.42	**Gallons in Well**	3.64
MP Elevation	764.91	**Pump Intake (ft-bmp)**	33	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:15	**Well Volumes Purged**	0.16	**Sample ID**	YGWC-23S	**Sampled by**	Jake Swanson
Purge Start	11:42	**Gallons Purged**	0.57	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:05						

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)
11:42:39	00:00	100	16.49	5.83	186.51	0.49	8.42	19.2	151.60
11:43:16	00:37	100	16.49	5.73	186.11	1.37	8.46	19.4	157.66
11:49:09	06:30	100	16.69	5.47	193.21	1.64	8.07	19.1	180.67
11:54:09	11:30	100	16.7	5.45	195.04	3.31	8.11	19.3	189.70
11:59:09	16:30	100	16.71	5.44	193.82	0.84	8.10	19.1	195.16
12:04:09	21:30	100	16.71	5.44	191.99	0.00	7.78	19.3	200.90

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (elapsed time=NTU)
11:30=2.12, 16:30=2.02, 21:30=1.88

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YGWA-21I			**Date**	03/04/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	It is Clear. The wind is blowing N at 10.3 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)	31.23	**Total Depth (ft-bmp)**	79.9	**Water Column(ft)**	48.67	**Gallons in Well**	7.91
MP Elevation	783.7	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:35	**Well Volumes Purged**	0.12	**Sample ID**	YGWA-21I	**Sampled by**	Peter Argyakis
Purge Start	09:04	**Gallons Purged**	0.92	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:34						

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)
09:04:36	00:00	100	31.23	6.83	222.21	1.57	5.53	16.4	-17.54
09:09:36	05:00	100	31.25	6.89	171.04	2.30	3.41	16.0	-54.51
09:14:36	10:00	100	31.33	6.89	163.94	1.15	2.20	15.6	-63.05
09:19:36	15:00	100	31.34	6.88	160.47	0.59	1.54	15.5	-60.87
09:24:36	20:00	100	31.4	6.83	159.33	0.49	1.50	15.5	-52.55
09:29:36	25:00	100	31.4	6.80	158.96	0.43	1.51	15.5	-48.96
09:34:36	30:00	100	31.4	6.80	158.80	0.35	1.50	15.5	-45.88

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Mercury,Metals	250 mL Plastic	1	HNO3
Anions	250 mL Plastic	1	SO4

Comments: LaMotte turbidity readings (time:NTU)
0904: 1.85
0909: 2.66
0914: 1.90
0919: 1.47
0924: 1.62
0929: 2.05
0934: 2.33

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWC-49			**Date**	03/04/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	69.4 degrees F and Clear. The wind is blowing N at 8.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	68.03	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.33	**Total Depth (ft-bmp)**	78.53	**Water Column(ft)**	47.2	**Gallons in Well**	7.67
MP Elevation	782.73	**Pump Intake (ft-bmp)**	73	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:50	**Well Volumes Purged**	0.10	**Sample ID**	YGWC-49	**Sampled by**	Katie Pupkiewicz
Purge Start	14:32	**Gallons Purged**	0.77	**Replicate/ Code No.**	FB-02	**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)
14:32:16	00:00	200	31.95	6.63	259.53	0.53	7.37	20.3	182.33
14:37:16	05:00	140	32.25	5.93	259.23	0.50	3.34	19.6	191.71
14:42:16	10:00	140	32.07	5.88	257.97	0.55	3.22	19.6	198.40
14:47:16	15:00	140	32.06	5.88	254.81	0.41	2.92	19.8	199.29

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride and SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log
0.94
1.70
1.18
1.09

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YGWC-24SA			**Date**	03/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	53.6 degrees F and Clear. The wind is blowing N at 9.2 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	47	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	28.05	**Total Depth (ft-bmp)**	57	**Water Column(ft)**	28.95	**Gallons in Well**	4.7
MP Elevation	765	**Pump Intake (ft-bmp)**	52	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:50	**Well Volumes Purged**	0.31	**Sample ID**	YGWC-24SA	**Sampled by**	Peter Argyakis
Purge Start	11:25	**Gallons Purged**	1.45	**Replicate/ Code No.**	DUP-2	**Color**	Clear
Purge End	11:45						

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)
11:25:25	00:00	200	28.05	6.07	93.54	3.03	7.55	17.9	228.00
11:30:25	05:00	200	28.05	5.80	79.73	3.81	6.77	18.7	243.15
11:35:25	10:00	300	28.05	5.71	78.78	1.51	6.73	17.8	253.34
11:40:25	15:00	300	28.05	5.70	77.05	1.28	6.59	18.1	258.58
11:45:25	20:00	300	28.05	5.70	79.20	1.52	6.56	18.2	260.52

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Mercury,Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	SO4

Comments:
LaMotte turbidity readings (time:NTU)
1125: 2.25
1130: 3.18
1135: 2.34
1140: 1.89
1145: 2.03

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____
Condition of Well: _____
Well Completion: NA
Well Locked at Arrival: _____
Well Locked at Departure: _____
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YGWA-4I			**Date**	03/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	50.0 degrees F and Clear. The wind is blowing N at 10.3 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)	24.32	**Total Depth (ft-bmp)**	48.81	**Water Column(ft)**	24.49	**Gallons in Well**	3.98
MP Elevation	784.21	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:35	**Well Volumes Purged**	0.17	**Sample ID**	YGWA-4I	**Sampled by**	Peter Argyakis
Purge Start	10:18	**Gallons Purged**	0.66	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:33						

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)
10:18:33	00:00	200	24.32	6.08	150.39	4.93	6.36	14.7	247.14
10:23:33	05:00	100	24.48	6.20	154.45	0.27	4.11	14.8	240.12
10:28:33	10:00	100	24.55	6.20	152.74	0.16	3.99	14.8	239.85
10:33:33	15:00	100	24.67	6.21	150.47	0.17	4.11	14.6	239.77

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
Mercury,Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)
1018: 1.03
1023: 1.59
1028: 0.76
1033: 1.14

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YAMW-2			**Date**	03/03/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	60.8 degrees F and Clear. The wind is blowing N/NW at 11.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	36.44	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	19.85	**Total Depth (ft-bmp)**	46.48	**Water Column(ft)**	26.63	**Gallons in Well**	4.33
MP Elevation	781.04	**Pump Intake (ft-bmp)**	42	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:34	**Well Volumes Purged**	0.40	**Sample ID**	YAMW-2	**Sampled by**	Peter Argyakis
Purge Start	13:34	**Gallons Purged**	1.72	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:04						

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)
13:44:02	10:00	200	19.85	5.71	59.21	4.33	5.42	20.3	151.20
13:49:02	15:00	200	19.85	5.69	58.47	5.00	5.13	20.3	167.02
13:54:02	20:00	200	19.85	5.67	58.68	2.52	4.97	20.1	180.86
13:59:02	25:00	200	19.85	5.65	58.97	2.55	4.97	20.2	187.85
14:04:02	30:00	200	19.85	5.67	59.05	1.90	4.95	20.7	189.97

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	SO4
Mercury,Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	None

Comments: LaMotte turbidity readings (time:NTU)
1334: 3.32
1339: 2.61
1344: 2.90
1349: 2.55
1354: 1.63
1359: 2.08
1404: 1.35

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	PZ-37			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**				
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	39.28	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.85	**Total Depth (ft-bmp)**	49.78	**Water Column(ft)**	37.93	**Gallons in Well**	6.16
MP Elevation	760.78	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:55	**Well Volumes Purged**	0.14	**Sample ID**	PZ-37	**Sampled by**	Katie Pupkiewicz
Purge Start	11:34	**Gallons Purged**	0.85	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:51						

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)
11:34:59	00:00	180	12.02	5.68	1510.62	0.09	6.36	18.5	203.06
11:39:59	05:00	180	12.07	5.54	1425.18	0.00	1.16	19.8	225.54
11:44:59	10:00	180	12.07	5.51	1436.50	0.00	0.73	20.2	234.96
11:49:59	15:00	180	12.1	5.51	1423.21	0.12	0.63	20.0	242.65

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride and SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes accordance with VuSitu purge log
1.40
1.62
1.54
1.24

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWC-38			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**				
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	39.59	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	30.22	**Total Depth (ft-bmp)**	50.59	**Water Column(ft)**	20.37	**Gallons in Well**	3.31
MP Elevation	799.69	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:45	**Well Volumes Purged**	0.24	**Sample ID**	YGWC-38	**Sampled by**	Katie Pupkiewicz
Purge Start	13:23	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:43						

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)
13:23:01	00:00	140	30.83	6.07	884.21	0.87	7.95	21.2	224.62
13:28:01	05:00	120	31.26	5.07	840.89	5.57	4.72	19.8	227.82
13:33:01	10:00	120	31.34	5.01	919.53	2.32	4.20	19.7	227.67
13:38:01	15:00	120	31.4	5.02	915.37	1.30	4.02	20.1	226.86
13:43:01	20:00	120	31.47	5.01	914.31	0.81	3.96	20.1	233.18

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride and SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log
1.15
3.96
3.40
1.49
0.97

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YAMW-5			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	67.8 degrees F and Clear. The wind is blowing N at 8.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	80.3	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	13.41	**Total Depth (ft-bmp)**	90.34	**Water Column(ft)**	76.93	**Gallons in Well**	12.5
MP Elevation	788.9	**Pump Intake (ft-bmp)**	86	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:15	**Well Volumes Purged**	0.11	**Sample ID**	YAMW-5	**Sampled by**	Peter Argyakis
Purge Start	13:45	**Gallons Purged**	1.32	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:10						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
13:45:32	00:00	200	13.41	4.90	0.06	0.28	8.21	21.8	231.42
13:50:32	05:00	200	13.55	5.29	821.37	0.04	7.07	21.6	238.12
13:55:32	10:00	200	13.62	5.29	825.45	0.00	6.69	21.3	260.54
14:00:32	15:00	200	13.7	5.29	827.79	0.00	6.00	22.7	267.99
14:05:32	20:00	200	13.77	5.31	826.69	0.00	6.18	22.3	270.92
14:10:32	25:00	200	13.86	5.32	833.39	0.02	5.65	24.1	266.64

Constituent Sampled	Container	Number	Preservative
Mercury,Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)
1345: 1.26
1350: 1.50
1355: 1.78
1400: 0.79
1405: 1.48
1410: 1.12

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30053438	**Well ID**	YAMW-4			**Date**	03/03/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	59.0 degrees F and Clear. The wind is blowing N at 10.3 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	86.59	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	30.77	**Total Depth (ft-bmp)**	96.55	**Water Column(ft)**	65.78	**Gallons in Well**	10.69
MP Elevation	805.59	**Pump Intake (ft-bmp)**	64	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:05	**Well Volumes Purged**	0.07	**Sample ID**	YAMW-4	**Sampled by**	Peter Argyakis
Purge Start	12:40	**Gallons Purged**	0.79	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:00						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:40:15	00:00	200	30.77	6.83	457.48	1.29	4.62	19.7	-108.44
12:45:15	05:00	100	30.98	6.83	450.29	1.48	2.85	20.3	-113.87
12:50:15	10:00	100	30.11	6.82	449.08	0.80	2.44	20.3	-120.01
12:55:15	15:00	100	30.15	6.81	449.07	0.56	1.86	20.1	-124.66
13:00:15	20:00	100	30.29	6.80	448.30	0.57	1.87	20.2	-129.14

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	SO4
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Mercury,Metals	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity readings (time:NTU)
1240: 1.60
1245: 1.74
1250: 1.14
1255: 0.82
1300: 0.97

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-40			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**				
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)	22.32	**Total Depth (ft-bmp)**	48.23	**Water Column(ft)**	25.91	**Gallons in Well**	4.21
MP Elevation	815.73	**Pump Intake (ft-bmp)**	42	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:10	**Well Volumes Purged**	0.37	**Sample ID**	YGWA-40	**Sampled by**	Katie Pupkiewicz
Purge Start	09:37	**Gallons Purged**	1.56	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:08						

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)
09:37:23	00:00	180	23	5.38	144.05	0.00	5.44	17.0	210.82
09:42:23	05:00	180	23.13	5.28	138.52	0.00	4.34	17.3	224.47
09:47:23	10:00	180	23.06	5.24	143.84	0.00	3.93	17.6	227.41
09:52:23	15:00	180	23.14	5.24	148.10	0.00	3.89	17.8	226.63
09:57:23	20:00	180	23.11	5.23	140.85	0.00	3.83	17.9	224.06
10:02:23	25:00	180	23.12	5.22	141.20	0.00	3.79	17.9	230.38
10:07:23	30:00	180	23.11	5.23	138.12	0.00	3.74	17.9	232.86

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride and SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log
0.45
0.63
0.38
0.42
0.40
0.44
0.36

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWC-42			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Clear. The wind is blowing N at 10.3 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	49.36	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.47	**Total Depth (ft-bmp)**	59.76	**Water Column(ft)**	32.29	**Gallons in Well**	5.25
MP Elevation	797.86	**Pump Intake (ft-bmp)**	55	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	08:45	**Well Volumes Purged**	0.12	**Sample ID**	YGWC-42	**Sampled by**	Katie Pupkiewicz
Purge Start	08:24	**Gallons Purged**	0.63	**Replicate/ Code No.**		**Color**	Clear
Purge End	08:41						

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)
08:24:57	00:00	180	28.37	5.83	1666.83	0.00	5.72	13.8	224.90
08:29:57	05:00	100	29.37	5.59	1660.04	0.00	2.02	15.8	222.94
08:34:57	10:00	100	29.37	5.59	1652.86	0.00	2.05	15.6	226.71
08:39:57	15:00	100	29.38	5.59	1651.55	0.00	1.88	15.9	227.39

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride and SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings taken every five minutes in accordance with VuSitu purge log
1.46
0.90
1.01
0.81

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWC-41			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Clear. The wind is blowing N at 11.4 mph. 40 F			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	56.82	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	26.81	**Total Depth (ft-bmp)**	67.32	**Water Column(ft)**	40.51	**Gallons in Well**	6.58
MP Elevation	803.92	**Pump Intake (ft-bmp)**	62	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:00	**Well Volumes Purged**	0.11	**Sample ID**	YGWC-41	**Sampled by**	Jake Swanson
Purge Start	08:25	**Gallons Purged**	0.70	**Replicate/ Code No.**		**Color**	Clear
Purge End	08:50						

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)
08:25:52	00:00	100	26.81	4.68	441.39	0.00	9.75	12.2	237.26
08:30:52	05:00	100	27.48	4.72	361.87	0.00	4.95	14.8	230.97
08:35:52	10:00	100	27.5	4.68	336.62	0.00	4.53	15.3	237.70
08:40:52	15:00	100	27.51	4.68	320.54	0.00	4.39	15.7	239.87
08:45:52	20:00	100	27.53	4.70	319.63	0.00	4.28	15.7	245.30
08:50:52	25:00	100	27.55	4.71	322.09	0.00	4.21	16.0	248.43
08:52:30	26:38	100	27.55	4.69	323.62	0.00	4.22	16.1	292.69

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time elapsed=NTU)
15:00 = 0.26, 20:00 = 0.18, 25:00 = 0.15

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot — 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location: _____ Well Locked at Arrival: _____

Condition of Well: _____ Well Locked at Departure: _____

Well Completion: NA Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWA-39			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	70.5 degrees F and Clear. The wind is blowing NW at 8.1 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)	16.59	**Total Depth (ft-bmp)**	68.59	**Water Column(ft)**	52	**Gallons in Well**	8.45
MP Elevation	818.19	**Pump Intake (ft-bmp)**	63	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:20	**Well Volumes Purged**	0.06	**Sample ID**	YGWA-39	**Sampled by**	Jake Swanson
Purge Start	09:53	**Gallons Purged**	0.53	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:15						

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)
09:53:02	00:00	100	16.59	6.25	228.95	0.00	6.98	15.6	147.02
09:58:02	05:00	100	16.79	5.71	244.96	0.00	2.43	16.5	67.77
10:03:02	10:00	100	16.79	5.63	256.80	0.00	1.38	16.8	83.04
10:08:02	15:00	100	16.79	5.60	259.73	0.00	1.12	17.2	91.98
10:13:02	20:00	100	16.8	5.54	260.59	0.00	1.05	17.5	92.55

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Mercury,Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Anions	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time elapsed:NTU)
10:00=0.21, 15:00=0.16, 20:00=0.11

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30053438	**Well ID**	YGWC-36A			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	59.9 degrees F and Clear. The wind is blowing N at 13.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	689.7	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	9.94	**Total Depth (ft-bmp)**	51.2	**Water Column(ft)**	41.26	**Gallons in Well**	6.7
MP Elevation	739.61	**Pump Intake (ft-bmp)**	46	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:35	**Well Volumes Purged**	0.45	**Sample ID**	YGWA-36A	**Sampled by**	Peter Argyakis
Purge Start	10:43	**Gallons Purged**	3.04	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:53						

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)
10:43:22	00:00	100	10.11	5.54	106.15	31.57	6.06	18.0	206.13
10:48:22	05:00	100	10.11	5.51	102.44	29.05	5.10	17.7	209.16
10:53:22	10:00	100	10.11	5.51	103.72	21.35	4.63	18.2	211.18
10:58:22	15:00	100	10.11	5.62	106.68	14.27	4.54	18.7	208.12
11:03:22	20:00	100	10.11	5.70	111.86	30.39	4.47	19.3	204.71
11:08:22	25:00	100	10.11	5.72	107.54	13.73	4.52	19.3	208.65
11:13:22	30:00	100	10.11	5.75	109.71	15.14	4.48	19.6	208.35
11:18:22	35:00	100	10.11	5.74	109.80	11.77	4.42	19.7	209.56
11:23:22	40:00	100	10.11	5.73	108.84	14.67	4.44	19.9	210.09
11:28:22	45:00	100	10.11	5.73	104.67	6.64	4.45	20.1	215.75
11:33:22	50:00	100	10.11	5.73	105.28	13.87	4.43	20.0	217.80
11:38:22	55:00	100	10.11	5.73	103.70	9.20	4.37	20.4	216.35
11:43:22	00:00	100	10.11	5.71	102.45	11.45	4.36	20.6	211.38
11:48:22	05:00	100	10.11	5.71	102.11	5.32	4.44	20.6	216.29
11:53:22	10:00	100	10.11	5.70	106.26	5.35	4.47	20.8	219.59
11:58:22	15:00	100	10.11	5.69	101.21	3.92	4.47	20.5	223.37
12:03:22	20:00	100	10.11	5.70	103.72	8.98	4.48	20.8	226.44
12:08:22	25:00	100	10.11	5.69	101.33	7.19	4.45	20.9	231.35
12:13:22	30:00	100	10.11	5.69	101.59	3.58	4.45	21.0	232.52
12:18:22	35:00	100	10.11	5.71	72.15	6.29	8.58	21.8	228.62
12:23:22	40:00	100	10.11	5.68	97.23	3.47	7.93	21.0	233.00
12:28:22	45:00	100	10.11	5.66	96.73	5.84	7.84	20.8	237.26
12:33:22	50:00	100	10.11	5.67	95.32	3.24	7.76	21.1	237.67

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Constituent Sampled	Container	Number	Preservative
Anions	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Mercury,Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None

Comments: LaMotte turbidity readings (time:NTU)
1043: 22.8
1048: 26.8
1053: 20.3
1058: 18.4
1103: 17.9
1108: 15.6
1113: 12.6
1118: 9.19
1123: 9.34
1128: 8.49
1133: 7.83
1138: 7.14
1143: 7.13
1148: 6.44
1153: 5.25
1158: 4.88
1203: 4.67
1208: 4.79
1213: 5.73
1318: 4:25
1323: 4.97
1328: 4:53
1353: 4.77

Mid sample: 4.33
End of sample: 4.29

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

Project Number	30052922	**Well ID**	YGWC-43			**Date**	03/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	69.4 degrees F and Clear. The wind is blowing N/NW at 13.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.16	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	16.25	**Total Depth (ft-bmp)**	79.66	**Water Column(ft)**	63.41	**Gallons in Well**	10.3
MP Elevation	744.96	**Pump Intake (ft-bmp)**	74	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:50	**Well Volumes Purged**	0.04	**Sample ID**	YGWC-43	**Sampled by**	Jake Swanson
Purge Start	14:28	**Gallons Purged**	0.40	**Replicate/ Code No.**	FB-01	**Color**	Clear
Purge End	14:43						

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)
14:28:16	00:00	100	16.25	7.14	687.49	0.93	7.88	24.2	-95.82
14:33:16	05:00	100	16.45	5.80	636.28	5.16	8.89	20.7	-51.83
14:38:16	10:00	100	16.47	5.85	644.46	0.00	8.84	20.4	-31.71
14:43:16	15:00	100	16.47	5.88	615.65	0.00	8.69	20.3	-19.08

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: LaMotte turbidity readings (time elapsed=NTU)
5:00=1.47, 10:00=1.05, 15:00= 1.13

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052922	**Well ID**	YGWA-18I			**Date**	03/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	63.3 degrees F and Clear. The wind is blowing N/NW at 3.4 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)	22.33	**Total Depth (ft-bmp)**	79.97	**Water Column(ft)**	57.64	**Gallons in Well**	9.37
MP Elevation	790.57	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:00	**Well Volumes Purged**	0.06	**Sample ID**	YGWA-18I	**Sampled by**	Jake Swanson
Purge Start	14:34	**Gallons Purged**	0.53	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:54						

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)
14:34:06	00:00	100	22.33	6.31	125.81	0.00	8.33	17.1	193.76
14:39:06	05:00	100	22.55	6.03	125.63	0.00	4.08	17.4	205.85
14:44:06	10:00	100	22.55	5.91	124.14	0.00	3.98	17.0	210.15
14:49:06	15:00	100	22.55	5.88	122.74	0.00	3.87	16.8	213.89
14:54:06	20:00	100	22.55	5.89	123.01	0.00	3.86	16.8	211.83

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: La Motte turbidity reading (elapsed time=NTU)
10:00 = 0.43, 15:00 = 0.27, 20:00 = 0.25

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot
1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimeters
mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	PZ-37
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:49:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18S
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:16:00

			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:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18I
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:17:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-23S
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:52:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-38
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:43:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-39
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:58:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-40
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:05:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-17S
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:24:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	PZ-51
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:33:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-43
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:35:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-3
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:25:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-2
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:15:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-4
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:09:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-5
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	08:40:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-42
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:26:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-41
Person Gauging:	Katie Pupkiewicz
Date:	3/2/2021
Time:	09:10:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5I
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	08:09:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-05S
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	08:11:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-04S
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	08:19:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-4I
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	08:21:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-20S
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	08:32:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-21I
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	08:39:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5D
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	08:05:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-6S
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:05:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-6I
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:03:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-06D
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:07:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-48
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:11:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-49
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:18:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-24IA
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:27:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-24SA
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:29:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YAMW-1
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:31:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-35
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:35:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-36A
Person Gauging:	Peter Argyakis
Date:	3/2/2021
Time:	09:37:00

			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:				
8	Date by when corrective actions are needed:				

May 2021

PZ-37D

May 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Becky Steever

Instrument Calibration

Date: 5/13/2021 Time: 11:00

Parameter	Units	Standard	YSI 556 SN 13E100653 Pre-Calibration	YSI 556 SN 13E100653 Post-Calibration
DO	% saturation	100	97.7	99.7
Conductivity	us/cm	1409	1400	1409
pH	S.U.	4.00	3.88	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.01	10.00
ORP	mV	240.0	236.2	240.0

Turbidity Standard	Units	LaMotte SN 1505-2219
0.0	NTU	0.08
10.0	NTU	10.10

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number		**Well ID**	PZ-37D			**Date**	5/13/21
Project Location			**Weather(°F)**	Sunny, and warm			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**		**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	5.95	**Total Depth (ft-bmp)**	202.85	**Water Column(ft)**	197.23	**Gallons in Well**	31.56
MP Elevation		**Pump Intake (ft-bmp)**	197.8	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:30	**Well Volumes Purged**		**Sample ID**	PZ-37D(051421)	**Sampled by**	Becky Steever
Purge Start	10:53	**Gallons Purged**	2.75	**Replicate/ Code No.**	DUP-01	**Color**	Clear
Purge End	12:26						

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)
10:53	0	200	5.95	Start					
11:07	14	150	12.58	8.02	794	3.06	0.89	18.04	-293.8
11:12	19	150	13.03	7.92	791	3.08	0.78	18.18	-341.7
11:17	24	125	13.41	7.86	777	2.99	0.23	18.43	-333.7
11:22	29	100	13.88	7.8	765	2.87	0.03	18.65	-325.2
11:27	34	100	13.95	7.77	765	2.11	0.01	18.57	-325.7
11:32	39	100	14.59	7.77	770	2.54	0.01	18.57	-323.3
11:37	44	100	15.38	7.74	748	2.34	0.01	18.56	-307.5
11:42	49	100	15.96	7.72	716	2.08	0.02	18.56	-316.8
11:47	54	100	16.40	7.74	702	2.01	0	18.55	-323.6
11:52	59	100	16.58	7.75	693	1.95	0.01	18.54	-325.5
11:57	64	100	16.80	7.77	671	1.87	0.01	18.55	-324.9
12:02	69	100	17.21	7.78	657	1.76	0.02	18.54	-321.6
12:07	74	100	17.64	7.78	651	1.77	0.01	18.53	-320.4
12:12	79	80		missed reading while adjusting pump flow rate					
12:16	84	80	18.95	7.77	644	1.22	0.01	18.53	-327.1
12:21	89	80	19.07	7.78	637	1.35	0.01	18.51	-323.7
12:26	94	80	19.18	7.79	634	1.36	0.01	18.49	-319.8

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
TDS	500 mL Plastic	1	None

Comments:

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:
Condition of Well:
Well Completion: NA
Well Locked at Arrival:
Well Locked at Departure:
Key Number To Well: NA

ft-bmp = feet below measuring point
in = inches
ft = feet
mL/min = milliliters per minute
mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
µS/cm = microSiemens per centimete

August/September 2021

Semiannual Event

August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest / Jake Swanson / Ash Willis

Instrument Calibration

Date: 8/18/2021 Time: 07:45

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest	SmarTROLL SN 519163 (Ash Willis)
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	235.4	235.4	235.4	235.4

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Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

*half day of field work

August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest / Jake Swanson / Ash Willis

Instrument Calibration

Date: 8/19/2021 Time: 07:30

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest	SmarTROLL SN 519163 (Ash Willis)
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 8/19/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest	SmarTROLL SN 519163 (Ash Willis)
DO	% saturation	100	--	100	100
Conductivity	us/cm	8000	--	8000	8000
pH	S.U.	4.00	--	4.00	4.00
pH	S.U.	7.00	--	7.00	7.00
pH	S.U.	10.00	--	10.00	10.00
ORP	mV	232.0	--	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	--	0.00
10.0	NTU	10.00	--	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

-- calibration not conducted

August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest / Jake Swanson / Ash Willis

Instrument Calibration

Date: 8/20/21 Time: 07:45

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest	SmarTROLL SN 509072 (Ash Willis)
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 8/20/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest	SmarTROLL SN 509072 (Ash Willis)
DO	% saturation	100	--	100	100
Conductivity	us/cm	8000	--	8000	8000
pH	S.U.	4.00	--	4.00	4.00
pH	S.U.	7.00	--	7.00	7.00
pH	S.U.	10.00	--	10.00	10.00
ORP	mV	232.0	--	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

-- calibration not conducted

August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Katie Pupkiewicz/Jake Swanson/Mark Chest

Instrument Calibration

Date: 8/25/21 Time: 07:30

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 509072 (Katie Pupkiewicz)
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Date: 8/25/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)
DO	% saturation	100	--
Conductivity	us/cm	8000	--
pH	S.U.	4.00	--
pH	S.U.	7.00	--
pH	S.U.	10.00	--
ORP	mV	232.0	--

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

*half day of field work for Katie Pupkiewicz

August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Katie Pupkiewicz/Jake Swanson/Mark Chest

Instrument Calibration

Date: 8/26/21 Time: 07:30

Parameter	Units	Standard	SmarTROLL SN 532229 (Mark Chest	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 509072 (Katie Pupkiewicz)
DO	% saturation	100	100	100	100
Conductivity	us/cm	8000	8000	8000	8000
pH	S.U.	4.00	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Date: 8/26/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 532229 (Mark Chest	SmarTROLL SN 685774 (Jake Swanson)
DO	% saturation	100	100	--
Conductivity	us/cm	8000	8000	--
pH	S.U.	4.00	4.00	--
pH	S.U.	7.00	7.00	--
pH	S.U.	10.00	10.00	--
ORP	mV	232.0	232.0	--

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013	LaMotte SN 1505-2219
0.0	NTU	0.00	0.00	0.00
10.0	NTU	10.00	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

*half day of field work for Katie Pupkiewicz

August 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest/Jake Swanson

Instrument Calibration

Date: 8/27/21 Time: 08:00

Parameter	Units	Standard	SmarTROLL SN 685774 (Jake Swanson)	SmarTROLL SN 532229 (Mark Chest
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

*half day of field work

September 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest/Jake Swanson

Instrument Calibration

Date: 9/01/21 Time: 08:00

Parameter	Units	Standard	SmarTROLL SN 509072 (Mark Chest)	SmarTROLL SN 685774 (Jake Swanson)
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Date: 9/01/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 509072 (Mark Chest)	SmarTROLL SN 685774 (Jake Swanson)
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

September 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Mark Chest/Jake Swanson

Instrument Calibration

Date: 9/02/21 Time: 08:00

Parameter	Units	Standard	SmarTROLL SN 509072 (Mark Chest)	SmarTROLL SN 685774 (Jake Swanson)
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Date: 9/02/21 Time: Midday

Parameter	Units	Standard	SmarTROLL SN 509072 (Mark Chest)	SmarTROLL SN 685774 (Jake Swanson)
DO	% saturation	100	100	100
Conductivity	us/cm	8000	8000	8000
pH	S.U.	4.00	4.00	4.00
pH	S.U.	7.00	7.00	7.00
pH	S.U.	10.00	10.00	10.00
ORP	mV	232.0	232.0	232.0

Turbidity Standard	Units	LaMotte SN 8140-2616	LaMotte SN 3764-4013
0.0	NTU	0.00	0.00
10.0	NTU	10.00	10.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	8/16/2021
Sampler:	Jake Swanson
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
PZ-37D	8/16/2021	09:47:00	5.86	202.44	--
PZ-35	8/16/2021	10:29:00	13.04	50.01	--
YAMW-1	8/16/2021	10:30:00	12.73	69.93	--
PZ-24IA	8/16/2021	10:36:00	28.82	89.85	--
YGWC-24SA	8/16/2021	10:39:00	28.21	57.00	--
YGWC-49	8/16/2021	10:43:00	31.89	78.53	--
PZ-48	8/16/2021	10:47:00	20.50	58.73	--
YGWA-18I	8/16/2021	10:51:00	23.94	79.97	--
YGWA-18S	8/16/2021	11:09:00	20.73	39.97	--
YGWA-17S	8/16/2021	11:14:00	13.30	39.85	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA R6 CCR Landfill
Date:	8/16/2021
Sampler:	Jake Swanson
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YAMW-4	8/16/2021	09:12:00	31.45	96.55	--
YGWC-41	8/16/2021	09:14:00	27.68	67.32	--
YGWA-40	8/16/2021	09:17:00	23.18	48.23	--
YGWA-39	8/16/2021	09:20:00	16.63	68.59	--
YGWC-38	8/16/2021	09:24:00	29.75	50.59	--
YAMW-5	8/16/2021	09:37:00	12.70	90.34	--
PZ-37	8/16/2021	09:40:00	11.74	49.78	--
YAMW-2	8/16/2021	09:51:00	22.29	46.48	--
YAMW-3	8/16/2021	10:11:00	36.12	91.44	--
YGWC-42	8/16/2021	10:12:00	28.62	59.76	--
PZ-51	8/16/2021	10:16:00	10.06	36.00	--
YGWC-43	8/16/2021	10:19:00	22.69	79.66	--
YGWC-36A	8/16/2021	10:22:00	12.60	51.20	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	8/16/2021
Sampler:	Becky Steever
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWA-6I	8/16/2021	10:53:00	4.05	69.03	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	8/17/2021
Sampler:	Becky Steever
Equipment:	--

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
PZ-06D	8/17/2021	15:02:00	22.31	134.02	--
YGWA-6S	8/17/2021	15:12:00	18.92	39.87	--
PZ-04S	8/17/2021	15:35:00	24.79	33.33	--
YGWA-4I	8/17/2021	15:35:00	23.32	48.81	--
PZ-05S	8/17/2021	15:37:00	19.55	41.94	--
YGWA-5I	8/17/2021	15:42:00	19.57	58.94	--
YGWA-5D	8/17/2021	15:43:00	22.23	129.13	--
YGWA-20S	8/17/2021	15:53:00	11.08	29.52	--
YGWA-21I	8/17/2021	16:06:00	--	79.90	--
PZ-04S	8/17/2021	16:42:00	24.79	33.33	--

ARCADIS Design & Consultancy for natural and built assets

Groundwater Gauging Log

Client:	Georgia Power
Project Location:	AMA AP-3, A, B and B'
Date:	8/25/2021
Sampler:	Jake Swanson
Equipment:	water probe

Well	Date	Time	Depth to Water (ft)	Well Depth (ft)	Comments
YGWC-23S	8/25/2021	14:13:00	16.72	38.91	--

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052923	**Well ID**	YGWA-4I			**Date**	08/26/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	74.5 degrees F and Mostly Cloudy. The wind is blowing E at 3.4 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)	23.44	**Total Depth (ft-bmp)**	48.81	**Water Column(ft)**	25.37	**Gallons in Well**	4.12
MP Elevation	784.21	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:29	**Well Volumes Purged**	1.64	**Sample ID**	YGWA-4I	**Sampled by**	Mark Chest
Purge Start	10:02	**Gallons Purged**	6.74	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:27						

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)
10:02:46	00:00	300	23.44	6.48	0.06	0.77	7.73	22.3	187.07
10:07:46	05:00	300	27.2	6.06	160.38	0.46	1.26	19.7	202.41
10:12:46	10:00	300	27.34	6.02	161.83	0.48	1.26	19.9	199
10:17:46	15:00	300	27.4	6.01	163.98	0.47	1.44	20.5	192.05
10:22:46	20:00	300	27.37	6.02	158.43	0.47	1.4	19.8	188.31
10:27:46	25:00	300	27.46	5.89	154.51	0.48	1.61	19.7	191.94
10:32:46	30:00	300	27.29	5.96	151.28	0.48	1.9	20.2	184.01
10:37:46	35:00	300	27.38	5.94	145.36	0.52	2.02	19.9	183.68
10:42:46	40:00	300	27.43	5.91	146.27	1.74	2.31	20.5	183.09
10:47:46	45:00	300	27.45	5.91	144.97	7.32	2.16	20	182.36
10:52:46	50:00	300	27.49	5.9	144.44	20.17	2.27	20.1	182.88
10:57:46	55:00	300	27.54	5.76	140.97	23.77	2.41	18.8	193.03
11:02:46	00:00	300	27.5	5.69	139.37	0.49	2.53	18.3	203.26
11:07:46	05:00	300	27.56	5.61	137.77	0.43	2.69	18.4	210.35
11:12:46	10:00	300	27.6	5.78	139	0.47	2.78	20.5	201.28
11:17:46	15:00	300	27.56	5.86	143.77	0.49	2.55	19.9	201.99
11:22:46	20:00	300	27.5	5.86	141.16	1.98	2.51	19.5	204.91
11:27:46	25:00	300	27.5	5.82	138.31	8.8	2.7	19.2	209.79

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: La Motte Turbidity Reading (time-NTU)
1007-0.07/ 1012-0.25/ 1017-0.14/ 1022-0.35/ 1027-0.23/ 1032-0.29/ 1037-0.09/ 1042-0.13/ 1047-0.20/ 1052-0.35/ 1057-0.18/ 1102-0.12/ 1107-0.20/ 1012-0.12/ 1117-0.05/ 1122-0.08/ 1127-0.27

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

Project Number	30053437	**Well ID**	YGWC-42			**Date**	08/25/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Mostly Cloudy. The wind is blowing E at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	49.36	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	28.74	**Total Depth (ft-bmp)**	59.76	**Water Column(ft)**	31.02	**Gallons in Well**	5.04
MP Elevation	797.86	**Pump Intake (ft-bmp)**	55	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:25	**Well Volumes Purged**	0.33	**Sample ID**	YGWC-42	**Sampled by**	Katie Pupkiewicz
Purge Start	12:52	**Gallons Purged**	1.66	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:20						

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)
12:52:30	00:00	180	30.69	5.82	1169.01	1.44	1.43	21.9	-24.15
12:57:30	05:00	180	30.68	5.62	1062.22	2.38	1.22	21.7	0.59
13:02:30	10:00	180	30.98	5.47	882.59	7.55	1.73	21.5	27.42
13:07:30	15:00	180	31.16	5.38	1126.25	16.55	1.8	24.1	52.37
13:12:30	20:00	180	31.32	6.69	1132.19	43.34	1.29	23.9	69.93
13:17:30	25:00	180	31.39	6.7	1116.06	72.74	1.33	25.3	27.93
13:22:30	30:00	180	31.46	6.69	1110.15	105.49	1.36	25.4	30.17
13:27:30	35:00	180	31.46	6.73	1120.85	138.62	1.33	27	28.2

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: Turbidity readings taken every five minutes in accordance with VuSitu purge
1.04
1.44
0.82
0.99
0.59
0.83
1.07
0.94

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

Project Number	30052923	**Well ID**	YGWA-5D			**Date**	08/26/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	It is Clear. The wind is blowing SE at 4.7 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)	21.92	**Total Depth (ft-bmp)**	129.13	**Water Column(ft)**	107.21	**Gallons in Well**	17.42
MP Elevation	784.53	**Pump Intake (ft-bmp)**	124	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:35	**Well Volumes Purged**	0.24	**Sample ID**	YGWA-5D	**Sampled by**	Mark Chest
Purge Start	12:53	**Gallons Purged**	4.23	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:34						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:53:40	00:00	400	21.92	6.82	191.62	6.13	5.99	24.7	-5.4
12:58:40	05:00	400	23.03	7.07	223.95	9.75	0.69	20.3	-92.96
13:03:40	10:00	400	23.1	7.04	214.76	19.29	0.58	20.2	-99.3
13:08:40	15:00	400	23.13	7.06	203.77	20.77	0.56	19.7	-99.8
13:13:40	20:00	400	23.16	6.91	221.05	5.66	1.08	20.4	-67.7
13:18:40	25:00	400	23.18	7.03	223.07	4.51	0.24	19.5	-100.1
13:23:40	30:00	400	23.18	7.08	223.22	4.55	0.2	19.6	-106.26
13:28:40	35:00	400	23.18	7.14	221.22	4.9	0.18	19.4	-110.24
13:33:40	40:00	400	23.18	7.16	222.78	2.89	0.17	19.5	-111.85

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity meter readings (Time:NTU) 1259:2.37; 1304:2.70; 1309:22.78; 1319:2.75; 1324:3.59; 1329:3.12; 1334:3.27

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

Project Number	30052923	**Well ID**	YGWA-40			**Date**	09/03/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	71.6 degrees F and Clear. The wind is blowing E at 6.9 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)	23.15	**Total Depth (ft-bmp)**	48.23	**Water Column(ft)**	25.08	**Gallons in Well**	4.08
MP Elevation	815.73	**Pump Intake (ft-bmp)**	42	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:20	**Well Volumes Purged**	0.66	**Sample ID**	YGWA-40	**Sampled by**	Mark Chest
Purge Start	09:37	**Gallons Purged**	2.69	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:17						

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)
09:37:54	00:00	250	23.15	4.96	113.1	0.55	1.13	18.9	224.56
09:42:54	05:00	250	25.22	4.9	113.81	0.6	1.24	18.9	227.09
09:47:54	10:00	250	25.3	4.88	110.19	1.04	0.93	19.1	227.94
09:52:54	15:00	250	25.36	4.87	108.14	2.99	0.85	19.2	229.56
09:57:54	20:00	250	25.36	4.86	109.18	7.21	0.79	19.1	231.4
10:02:54	25:00	250	25.36	4.88	110.59	13.7	0.73	19.4	232.56
10:07:54	30:00	250	25.36	5	111.49	30.42	0.72	19.2	227.61
10:12:54	35:00	250	25.34	4.98	111.27	61.75	0.69	19.4	229.56
10:17:54	40:00	250	25.34	4.99	111.49	113.5	0.68	19.5	230.57
10:18:40	40:46	250	25.34	5.01	111.53	106.58	0.68	19.5	229.69

Constituent Sampled	Container	Number	Preservative
Metals,Metals-Cations	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
TDS	500 mL Plastic	1	None
Anions-Alk	250 mL Plastic	1	None

Comments: LaMotte turbidity meter readings (Time: NTU) 0942:0.59; 0947:0.53; 0952:0.25; 0957:0.05; 1002:0.21; 1007:0.29; 1012:0.49; 1017:0.35

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

Project Number	30053437	**Well ID**	YGWC-41			**Date**	08/26/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	78.4 degrees F and Clear. The wind is blowing SE at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	56.82	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	27.81	**Total Depth (ft-bmp)**	67.32	**Water Column(ft)**	39.51	**Gallons in Well**	6.42
MP Elevation	803.92	**Pump Intake (ft-bmp)**	62	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:25	**Well Volumes Purged**	0.14	**Sample ID**	YGWC-41	**Sampled by**	Katie Pupkiewicz
Purge Start	09:55	**Gallons Purged**	0.90	**Replicate/ Code No.**	AMA-DUP-2	**Color**	Clear
Purge End	10:20						

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)
09:55:31	00:00	200	28.47	6.88	334.81	1.06	5.8	22.9	36.71
10:00:31	05:00	120	28.87	6.79	278.6	0.93	4.34	21.1	36.13
10:05:31	10:00	120	28.6	6.71	263.64	0.9	4.39	21.7	41.54
10:10:31	15:00	120	28.54	6.75	258.6	0.88	4.14	21.8	41.34
10:15:31	20:00	120	28.5	6.77	261.25	0.91	3.99	21.9	40.94
10:20:31	25:00	120	28.52	6.77	267.25	0.93	4.06	22.1	40.79

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: Turbidity readings taken every five minutes in accordance with VuSitu purge log
0.80
0.97
1.15
0.85
0.69
0.55

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

Project Number	30053437	**Well ID**	YGWA-39			**Date**	08/26/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Clear. The wind is blowing SE at 4.7 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)	16.85	**Total Depth (ft-bmp)**	68.59	**Water Column(ft)**	51.74	**Gallons in Well**	8.41
MP Elevation	818.19	**Pump Intake (ft-bmp)**	63	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:30	**Well Volumes Purged**	0.15	**Sample ID**	YGWA-39	**Sampled by**	Katie Pupkiewicz
Purge Start	11:54	**Gallons Purged**	1.27	**Replicate/ Code No.**	UP-EB-1	**Color**	Clear
Purge End	12:25						

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)
11:54:21	00:00	160	17.12	7.03	242.33	2.2	4.39	25.8	21.32
11:59:21	05:00	160	17.2	6.18	334.62	1.68	0.57	23.3	13.02
12:04:21	10:00	160	17.2	6.84	355.4	9.02	0.22	23.1	48.32
12:09:21	15:00	160	17.25	6.85	365.53	82.68	0.17	23.3	31.23
12:14:21	20:00	160	17.22	6.89	330.49	185.23	0.16	23.3	30.13
12:19:21	25:00	160	17.25	6.9	324.45	267.5	0.15	23.9	29.83
12:24:21	30:00	160	17.26	6.91	318.31	380.85	0.16	23.5	29.15

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: Turbidity readings taken every five minutes in accordance with VuSitu purge log
2.06
5.15
2.85
7.87
2.33
3.16
4.17
Equipment blank taken UP-EB-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:
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

Project Number	30053437	**Well ID**	YAMW-4			**Date**	08/25/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Partly Cloudy. The wind is blowing SE at 3.4 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	86.59	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	31.58	**Total Depth (ft-bmp)**	96.55	**Water Column(ft)**	64.97	**Gallons in Well**	10.56
MP Elevation	805.59	**Pump Intake (ft-bmp)**	91.55	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:50	**Well Volumes Purged**	0.21	**Sample ID**	YAMW-4	**Sampled by**	Katie Pupkiewicz
Purge Start	16:29	**Gallons Purged**	2.21	**Replicate/ Code No.**	UP-FB-1	**Color**	Clear
Purge End	17:45						

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)
16:29:03	00:00	140	33.05	6.81	444.56	3.42	3.35	27.6	27.58
16:34:03	05:00	140	33.85	6.74	466.62	7.31	2.87	25.1	29.7
16:37:51	08:48	140	33.85	6.73	471.89	15.02	2.1	24.3	40.64
16:42:51	13:48	140	35.25	6.76	471.18	15.34	1.34	23.8	33.44
16:47:51	18:48	120	36.02	6.76	471.24	17.73	1.05	23.7	31.17
16:52:51	23:48	120	36.33	6.78	472.08	20.62	1.04	24.3	85.76
16:57:51	28:48	120	36.7	6.24	471.3	25	0.87	24.6	26.83
17:02:51	33:48	100	37	6.8	469.08	27.65	0.87	24.5	26.41
17:07:51	38:48	100	37.42	6.01	478.96	29.2	0.7	26.9	80.04
17:12:51	43:48	100	37.63	6.76	466.24	31.91	0.62	24.8	28.34
17:17:51	48:48	100	37.88	6.78	467.44	37.97	0.63	24.4	26.74
17:22:51	53:48	100	38.12	6.78	465.65	42.85	0.65	24.1	26.54
17:27:51	58:48	100	38.32	6.77	465.69	46.24	0.53	23.9	26.6
17:32:51	03:48	100	38.51	6.79	464.47	52.03	0.49	23.4	25.23
17:37:51	08:48	90	38.71	6.79	464.87	53.22	0.49	23.4	25.04
17:42:51	13:48	90	38.51	6.79	466.14	57.64	0.44	23.9	25.04

Constituent Sampled	Container	Number	Preservative
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
TDS	500 mL Plastic	1	None
Chloride,Fluoride SO4	250 mL Plastic	1	None

Comments: Turbidity readings taken every five minutes in accordance with VuSitu purge log
13.83
11.9
10.7
9.92
13.28
11.36
10.89
11.59
11.19
10.63
10.33
9.57
7.69
6.9
4.32
3.29

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

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052923	**Well ID**	YGWA-5I			**Date**	08/26/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	Sunny/ Hot			
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)	19.65	**Total Depth (ft-bmp)**	58.94	**Water Column(ft)**	39.29	**Gallons in Well**	6.38
MP Elevation	784.54	**Pump Intake (ft-bmp)**	53	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:26	**Well Volumes Purged**	1.81	**Sample ID**	YGWA-5I	**Sampled by**	Mark Chest
Purge Start	13:56	**Gallons Purged**	11.56	**Replicate/ Code No.**	UP-DUP-3	**Color**	Clear
Purge End	16:06						

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)
13:56:31	00:00	300	19.65	6.39	81.28	4.14	5.73	21.2	61.65
14:01:31	05:00	300	20.42	5.4	83.25	5.34	6.18	19.6	151.26
14:06:31	10:00	300	20.42	5.46	78.77	7.65	6.17	19	168.17
14:11:31	15:00	300	20.42	5.4	90.41	11.47	6.19	19.2	184.13
14:16:31	20:00	300	20.42	5.48	89.97	12.49	6.18	19.3	188.02
14:21:31	25:00	300	20.42	5.58	90.22	14.62	6.19	19.1	189.83
14:26:31	30:00	300	20.42	5.42	91.2	20.39	6.24	19	204.91
14:31:31	35:00	300	20.42	5.55	90.51	26.26	6.23	18.9	201.71
14:36:31	40:00	300	20.42	5.36	90.28	27.26	6.19	18.9	216.23
14:40:02	43:31	300	20.42	5.57	90.21	36.64	6.19	19	206.58
14:45:02	48:31	300	20.42	5.35	90.46	44.78	6.18	19	222.68
14:50:02	53:31	300	20.42	5.54	90.04	49.59	6.19	18.8	214.64
14:56:29	59:58	300	20.42	5.58	91.25	0.76	6.42	19.1	227.44
15:01:29	04:58	300	20.42	5.59	92.59	0.5	6.21	19	218.16
15:06:29	09:58	300	20.42	5.31	91.43	0.53	6.21	18.9	236.6
15:11:29	14:58	300	20.42	5.54	90.97	1.11	6.19	18.9	226.33
15:16:29	19:58	300	20.42	5.61	91.54	1.09	6.18	19	223.43
15:21:29	24:58	300	20.42	5.44	90.93	7.15	6.14	18.9	234.74
15:26:29	29:58	300	20.42	5.62	92.87	0.46	6.29	18.9	204.68
15:31:29	34:58	300	20.42	5.27	91.98	0.45	6.23	18.9	220.91
15:36:29	39:58	300	20.42	5.51	91.15	0.5	6.22	18.7	217.5
15:41:29	44:58	300	20.42	5.59	91.34	0.49	6.23	18.8	218.32
15:46:29	49:58	300	20.42	5.36	91.48	0.51	6.23	18.7	236.59
15:51:29	54:58	300	20.42	5.57	91.12	0.49	6.21	18.7	226.82
15:56:29	59:58	300	20.42	5.3	91.19	0.51	6.21	18.8	241.77
16:01:29	04:58	250	20.39	5.5	90.79	0.5	6.21	18.8	234.46
16:06:29	09:58	250	20.39	5.62	91.33	0.51	6.22	19.5	227.2
16:11:29	14:58	250	20.26	5.31	91.3	0.52	6.15	20	245.61
16:16:29	19:58	250	20.26	5.59	84.13	1.51	6.13	19.9	228.26
16:21:29	24:58	250	20.26	5.63	83.42	8.99	5.99	19.9	226.81
16:26:29	29:58	250	20.26	5.51	84.22	41.65	5.93	20	234.1

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	2	None
RAD Chem	1L Plastic	4	HNO3
Metals	250 mL Plastic	2	HNO3
Anions	250 mL Plastic	2	None

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Comments: LaMotte turbidity meter readings (Time:NTU)1401:0.49; 1406:1.00; 1411:0.70; 1416:0.32; 1421:0.37; 1426:0.26; 1431:0.54; 1436:0.48; 1441:0.70; 1446:0.35; 1451:0.39; 1456:0.75; 1500:0.33; 1506:0.82; 1511:0.27; 1516:0.57; 1521:0.47; 1526:0.24; 1531:0.16; 1536:0.36; 1541:0.22; 1546:0.13; 1551:0.56; 1602:0.11; 1606:0.65; 1611:0.28; 1616:0.36; 1621:0.45; 1626:0.58 unable to Stabilize PH and turbidity from the in situ meter. However, PH is within historical range and turbidity readings on the Lamotte are below five.

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

Project Number	30052923	**Well ID**	YAMW-1			**Date**	09/01/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	It is Cloudy. The wind is blowing W/NW at 6.9 mph. 72			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	59.6	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.61	**Total Depth (ft-bmp)**	69.93	**Water Column(ft)**	57.32	**Gallons in Well**	9.31
MP Elevation	743.83	**Pump Intake (ft-bmp)**	65	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:36	**Well Volumes Purged**	0.12	**Sample ID**	YAMW-1	**Sampled by**	Mark Chest
Purge Start	10:13	**Gallons Purged**	1.12	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:33						

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)
10:13:39	00:00	250	12.61	6.33	207.91	1.78	3	25.4	140.55
10:18:39	05:00	200	14.05	6.14	273.96	19.81	2.87	21.5	155.57
10:23:39	10:00	200	14.09	6.06	287.7	10.08	2.18	22.1	159.08
10:28:39	15:00	200	14.09	6.01	312.63	14.7	2.05	21.6	162.23
10:33:39	20:00	200	14.09	5.97	313	30.16	2.08	21.8	164.34

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Alkalinity	250 mL Plastic	1	None

Comments: LaMotte turbidity meter readings (Time: NTU) 1018:11.70; 1023:4.32; 1028:3.13; 1033:2.34

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

Project Number	30052923	**Well ID**	YAMW-2			**Date**	09/01/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	83.5 degrees F and Partly Cloudy. The wind is blowing W/NW at 8.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	36.44	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	22.5	**Total Depth (ft-bmp)**	46.48	**Water Column(ft)**	23.98	**Gallons in Well**	3.9
MP Elevation	781.04	**Pump Intake (ft-bmp)**	39	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:50	**Well Volumes Purged**	0.34	**Sample ID**	YAMW-2	**Sampled by**	Mark Chest
Purge Start	13:29	**Gallons Purged**	1.32	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:49						

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)
13:29:03	00:00	250	22.5	6.73	68.41	31.24	3.64	20.4	42.53
13:34:03	05:00	250	22.65	5.73	62.66	56	3.53	20.5	42.64
13:39:03	10:00	250	22.65	6.72	61.56	164.48	3.54	20.3	41.06
13:44:03	15:00	250	22.65	6.69	60.53	212.31	3.61	20.6	43.51
13:49:03	20:00	250	22.65	6.67	60.78	326.27	3.64	20.1	44.64

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	500 mL Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity meter readings (Time: NTU) 1334:3.22; 1339:3.48; 1344:3.33; 1349:1.87

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot

1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Project Number	30052923	**Well ID**	YGWC-49			**Date**	09/01/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	86.0 degrees F and Mostly Cloudy. The wind is blowing NW at 12.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	68.03	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	32	**Total Depth (ft-bmp)**	78.53	**Water Column(ft)**	46.53	**Gallons in Well**	7.56
MP Elevation	782.73	**Pump Intake (ft-bmp)**	73	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:30	**Well Volumes Purged**	0.30	**Sample ID**	YGWC-49	**Sampled by**	Mark Chest
Purge Start	14:52	**Gallons Purged**	2.29	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:27						

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)
14:52:23	00:00	250	32	6.49	223.08	2.67	6.86	26.9	156.78
14:57:23	05:00	250	33.4	5.72	227.99	0.9	2.25	21.1	84.01
15:02:02	09:39	250	33.4	5.65	227.43	0.92	2.15	21.3	113.79
15:07:02	14:39	250	33.4	5.45	230.82	4.23	2.22	21.1	138.07
15:12:02	19:39	250	33.4	5.3	232.42	14.43	2.27	21.1	156.7
15:17:02	24:39	250	33.4	5.16	232.33	50.21	2.28	21.1	171.3
15:22:02	29:39	250	33.4	5.15	232.1	38.32	2.29	20.9	176.87
15:27:02	34:39	250	33.4	5.15	234.36	76.57	2.29	21.2	180.98

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity meter readings (Time: NTU) 1457:0.89; 1502:0.52; 1507:0.35; 1512:0.44; 1517:0.25; 1522:0.36; 1527:0.48

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

Project Number	30052923	**Well ID**	PZ-35			**Date**	09/01/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	79.3 degrees F and Cloudy. The wind is blowing NW at 5.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	38.91	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.9	**Total Depth (ft-bmp)**	50.01	**Water Column(ft)**	37.11	**Gallons in Well**	6.03
MP Elevation	743.81	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:00	**Well Volumes Purged**	0.44	**Sample ID**	PZ-35	**Sampled by**	Mark Chest
Purge Start	11:11	**Gallons Purged**	2.64	**Replicate/ Code No.**		**Color**	Clear
Purge End	23:52						

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)
11:11:55	00:00	250	12.9	6.85	79.57	6.87	2.45	26.3	31.1
11:16:55	05:00	250	13.23	6.82	122.87	13.64	4.68	22.2	26.37
11:21:55	10:00	250	13.23	5.57	125.34	12.49	4.33	22.1	66.97
11:26:55	15:00	250	13.25	6.82	127.87	8.74	4.29	22.2	24.7
11:31:55	20:00	250	13.25	5.6	134.82	10.41	4.26	21.9	63.59
11:36:55	25:00	250	13.25	5.35	138.78	20.54	4.22	21.8	23.98
11:41:55	30:00	250	13.25	6.83	139.82	54.24	4.19	22.2	24.53
11:46:55	35:00	250	13.26	6.81	139.79	104.95	4.16	22.6	23.77
11:51:55	40:00	250	13.26	6.82	139.98	191.51	4.14	22.2	24.94

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Cations, Anions, Alk	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: LaMotte turbidity meter readings (Time: NTU) 1117:4.70; 1122:4.53; 1127:4.26; 1132:3.62; 1137:3.56; 1142:3.99; 1147:4.18; 1152:3.22

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

Project Number	30052922	**Well ID**	YGWC-36A			**Date**	09/03/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	81.9 degrees F and Mostly Cloudy. The wind is blowing N/NW at 8.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	689.7	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.34	**Total Depth (ft-bmp)**	51.2	**Water Column(ft)**	38.86	**Gallons in Well**	6.31
MP Elevation	739.61	**Pump Intake (ft-bmp)**	46	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:00	**Well Volumes Purged**	0.17	**Sample ID**	YGWC-36A	**Sampled by**	Jake Swanson
Purge Start	13:32	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	13:55						

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)
13:32:08	00:00	200	12.34	5.24	99.62	27.59	5.98	23.9	65.04
13:37:08	05:00	200	12.63	4.98	98.15	73.04	5.11	23.9	87.24
13:42:08	10:00	200	12.69	4.97	97.58	123.86	4.76	23.9	94.9
13:47:08	15:00	200	12.66	5.05	96.32	199.85	4.65	23.9	99.07
13:52:08	20:00	200	12.66	5.06	95.99	233.01	4.52	23.7	107.99

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Dissolved Metals	500 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Cations	250 mL Plastic	1	None

Comments: Lamotte turbidity readings(Time:NTU) 1237:3.78; 1242:3,45; 1247:3.78; 1252:3.40

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

Project Number	30052922	**Well ID**	PZ-37D			**Date**	09/03/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	78.4 degrees F and Clear. The wind is blowing SE at 8.1 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	192.44	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6	**Total Depth (ft-bmp)**	202.44	**Water Column(ft)**	196.44	**Gallons in Well**	31.92
MP Elevation	761.12	**Pump Intake (ft-bmp)**	197	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:20	**Well Volumes Purged**	0.04	**Sample ID**	PZ-37D	**Sampled by**	Jake Swanson
Purge Start	11:41	**Gallons Purged**	1.19	**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)
11:41:49	00:00	200	6	6.32	631.85	100.21	4.46	32.3	34.2
11:46:49	05:00	200	6.51	7.33	558.44	6.97	1.25	26.1	-178.52
11:51:49	10:00	100	7.04	7.28	564.83	4.84	0.77	26.1	-190.61
11:56:57	15:08	100	7.2	7.26	570.36	59	0.66	26.4	-198.01
12:01:57	20:08	100	7.48	7.26	571.52	11.36	0.72	28	-202.34
12:06:57	25:08	100	7.62	7.35	571.5	16.62	0.8	28.6	-208.33
12:11:57	30:08	100	7.75	7.38	571.52	24.78	0.78	28.9	-215.95
12:16:57	35:08	100	7.79	7.44	572.59	32.58	0.76	29.2	-221.46

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Dissolved Metals	500 mL Plastic	1	None

Comments: Lamotte turbidity readings(Time:NTU) 1146:3.34; 1151:3.10; 1156:4.34; 1201:2.21; 1206:2.36; 1211:2.39; 1216:2.15

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

Project Number	30052922	**Well ID**	YGWC-24SA			**Date**	09/01/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	It is Mostly Cloudy. The wind is blowing W/NW at 6.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	47	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	28.38	**Total Depth (ft-bmp)**	57	**Water Column(ft)**	28.62	**Gallons in Well**	4.65
MP Elevation	765	**Pump Intake (ft-bmp)**	52	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:25	**Well Volumes Purged**	0.23	**Sample ID**	YGWC-24SA	**Sampled by**	Jake Swanson
Purge Start	09:58	**Gallons Purged**	1.06	**Replicate/ Code No.**	AMA-Dup-1	**Color**	Clear
Purge End	10:18						

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)
09:58:05	00:00	200	28.38	5.84	85.62	1.75	6.46	21.4	91.55
10:03:05	05:00	200	28.71	5.16	75.68	1.2	6.27	20.1	147.16
10:08:05	10:00	200	28.7	5.13	75.31	1.17	6.33	19.9	160.48
10:13:05	15:00	200	28.72	5.16	75.14	1.1	6.32	20	166.49
10:18:05	20:00	200	28.7	5.22	74.86	1.06	6.34	19.8	169.69

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Dissolved Metals	500 mL Plastic	1	None

Comments: Lamotte turbidity readings (Time:NTU) 1003:1.20; 1008:0.98; 1013:0.80; 1018:0.82

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

Project Number	30052922	**Well ID**	YAMW-5			**Date**	08/26/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Clear. The wind is blowing SE at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	80.3	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	12.7	**Total Depth (ft-bmp)**	90.34	**Water Column(ft)**	77.64	**Gallons in Well**	12.62
MP Elevation	788.9	**Pump Intake (ft-bmp)**	85	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	23:25	**Well Volumes Purged**	0.07	**Sample ID**	YAMW-5	**Sampled by**	Jake Swanson
Purge Start	10:42	**Gallons Purged**	0.89	**Replicate/ Code No.**		**Color**	Clear
Purge End	23:20						

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)
10:42:47	00:00	100	12.7	5.51	786.15	1.67	3.12	24.4	199.22
10:47:47	05:00	100	13.81	5.36	793.02	1.56	2.76	21.7	202.07
10:52:47	10:00	100	13.93	5.35	796.84	1.56	2.29	21.6	206.87
10:59:12	16:25	100	14.14	5.36	801.11	1.92	2.37	20.9	267.16
11:01:33	18:46	100	14.26	5.36	800.04	1.61	2.37	20.7	305.08
11:06:33	23:46	100	14.32	5.35	797.21	1.72	2.18	20.9	276.58
11:11:33	28:46	100	14.48	5.34	795.43	1.95	2.07	21	268.17
11:16:33	33:46	100	14.6	5.35	792.74	1.85	2.02	21.1	260.96

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Dissolved Metals	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3

Comments: Lamotte turbidity readings(Time:NTU) 1047:2.01; 1052:1.87; 1058:1.63; 1105:1.88; 1110:1.53; 1115:1.26

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

Project Number	30052922	**Well ID**	YGWA-20S			**Date**	08/27/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	86.9 degrees F and Mostly Cloudy. The wind is blowing E/SE at 6.9 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)	11.68	**Total Depth (ft-bmp)**	29.52	**Water Column(ft)**	17.84	**Gallons in Well**	2.9
MP Elevation	767.12	**Pump Intake (ft-bmp)**	24.5	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	13:10	**Well Volumes Purged**	0.83	**Sample ID**	YGWA-20S	**Sampled by**	Jake Swanson
Purge Start	12:19	**Gallons Purged**	2.41	**Replicate/ Code No.**	AMA-EB-2 at 1340	**Color**	Clear
Purge End	13:06						

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)
12:19:40	00:00	200	11.68	5.57	52.17	28.43	7.78	18.4	226.99
12:24:40	05:00	200	12.6	5.19	52.15	8.49	7.7	18	250.96
12:29:40	10:00	200	12.68	5.17	52.08	13.63	7.69	17.6	255.64
12:34:40	15:00	200	12.72	5.19	52.06	28.82	7.67	17.8	257.37
12:39:40	20:00	200	12.78	5.29	51.84	36.71	7.58	17.8	254.09
12:44:40	25:00	200	12.76	5.4	51.81	66.9	7.58	17.7	250.48
12:50:21	30:41	200	12.72	5.51	51.83	164.8	7.59	18	337.72
12:55:21	35:41	200	12.76	5.57	51.79	220.48	7.52	18.1	321.65
13:00:21	40:41	200	12.76	5.63	51.63	245.85	7.47	18	312.19
13:05:21	45:41	200	12.76	5.57	51.42	386.2	7.49	18.3	310.85

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Dissolved Metals	500 mL Plastic	1	None

Comments: Lamotte turbidity readings (Time:NTU) 1224:4.21; 1229:3.64; 1234:2.43; 1239:2.13; 1244:3.76; 1250:3.56; 1255:2.11; 1300:2.38 1305:2.18

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

Project Number	30052922	**Well ID**	YGWC-38			**Date**	08/26/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Clear. The wind is blowing SE at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	39.59	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	29.76	**Total Depth (ft-bmp)**	50.59	**Water Column(ft)**	20.83	**Gallons in Well**	3.38
MP Elevation	799.69	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:40	**Well Volumes Purged**	0.16	**Sample ID**	YGWC-38	**Sampled by**	Jake Swanson
Purge Start	12:14	**Gallons Purged**	0.53	**Replicate/ Code No.**		**Color**	Clear
Purge End	12:35						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:14:06	00:00	100	29.76	4.63	775.56	25.92	4.06	22	240.23
12:19:06	05:00	100	30.77	4.52	766.49	16.74	3.9	22	253.78
12:24:06	10:00	100	30.86	4.51	764.33	26.56	3.87	21.8	260.04
12:29:06	15:00	100	30.89	4.52	764.73	43.29	3.86	21.9	264.53
12:34:06	20:00	100	30.92	4.54	768.95	74.97	3.83	21.8	267.7

Constituent Sampled	Container	Number	Preservative
Dissolved Metals	500 mL Plastic	1	None
Chloride	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3

Comments: Lamotte turbidity readings (Time:NTU) 1219:3.62; 1224:3.45; 1229:2.31; 1234:1.60

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

Project Number	30052922	**Well ID**	PZ-37			**Date**	08/25/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Partly Cloudy. The wind is blowing SE at 6.9 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	39.28	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.54	**Total Depth (ft-bmp)**	49.78	**Water Column(ft)**	38.24	**Gallons in Well**	6.21
MP Elevation	760.78	**Pump Intake (ft-bmp)**	45	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:30	**Well Volumes Purged**	1.24	**Sample ID**	PZ-37	**Sampled by**	Jake Swanson
Purge Start	09:54	**Gallons Purged**	7.72	**Replicate/ Code No.**	AMA-Dup-04	**Color**	Clear
Purge End	12:20						

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)
09:54:30	00:00	200	11.54	6.27	0.16	16.38	6.47	35.9	152.32
09:59:30	05:00	200	11.62	6.19	0.05	42.12	6.39	36	152.03
10:05:36	11:06	200	11.63	6.29	11.83	51.35	6.66	34.5	169.99
10:10:36	16:06	200	11.65	6.4	0.1	3.96	6.35	35.7	161.49
10:15:36	21:06	200	11.67	6.32	0	4.03	6.25	36.4	152.62
10:20:36	26:06	200	11.69	6.18	0	4.11	6.18	36.8	147.85
10:25:36	31:06	200	11.69	5.99	0.79	4.46	6.22	36.8	145.39
10:30:36	36:06	200	11.69	5.57	1259.8	5.45	1.29	30	158.31
10:35:36	41:06	200	11.69	5.39	1108.75	3.37	0.75	31.4	163.86
10:40:36	46:06	200	11.69	5.56	1110.29	3.34	0.61	31.7	166.42
10:45:36	51:06	200	11.66	5.5	1115.78	4.92	0.65	31.9	170.76
10:50:36	56:06	200	11.69	5.52	1110.13	5.68	0.68	32	175.01
10:55:36	01:06	200	11.72	5.54	1122.42	7.02	0.7	32.2	180.25
11:00:36	06:06	200	11.66	5.44	1128.26	9.98	0.71	32.4	181.02
11:05:36	11:06	200	11.66	5.46	1134.15	12.62	0.71	32.6	184.81
11:10:36	16:06	200	11.66	5.48	1119.25	17	0.71	32.9	186.64
11:15:36	21:06	200	11.66	5.33	1095.11	19.89	0.71	32.7	188.36
11:20:36	26:06	200	11.66	5.32	1106.92	27.82	0.66	33.1	190.5
11:25:36	31:06	200	11.66	5.24	1121.48	37.14	0.66	32.8	190.77
11:30:36	36:06	200	11.67	5.25	1113.67	58.51	0.67	33	185.47
11:35:36	41:06	200	11.67	5.26	1116.12	69.98	0.69	33.3	185.08
11:40:36	46:06	200	11.67	5.24	1148.91	81.79	0.71	32.1	184.5
11:45:36	51:06	200	11.67	5.24	1159.33	93.74	0.7	31.6	189.06
11:50:36	56:06	200	11.67	5.29	1146.9	98.28	0.69	32.8	190.59
11:55:36	01:06	200	11.67	5.29	1147.25	103.43	0.7	33.8	190.87
12:00:36	06:06	200	11.67	5.26	1147.77	119.55	0.7	34.8	193.37
12:05:36	11:06	200	11.67	5.28	1157.64	129.68	0.7	35.9	191.7
12:10:36	16:06	200	11.67	5.26	1075.89	139.85	0.78	33.8	192.32
12:15:36	21:06	200	11.67	5.25	1149.93	222.46	0.79	32.2	199.2
12:20:36	26:06	200	11.67	5.28	1162.13	268.46	0.77	32.5	186.7

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Dissolved Metals	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Comments: Lamotte turbidity readings (Time:NTU) 0954: 3.23; 0959:2.72; 1005:2.50; 1010:2.80; 1015:3.19; 1020:3.54; 1025:3.76; 1030:3.92; 1035:3.68; 1040:3.97; 1045:5.39; 1050:7.29; 1055:5.72; 1100:5.61; 1105:5.46; 1110:5.97; 1115:5.65; 1120:5.47; 1125:5.16; 1130:5.40; 1135:5.95; 1140:5.20; 1145:5.04; 1150:5.02; 1155:4.99; 1200:4.59; 1205:4.40; 1210:4.87; 1215:4.90; 1220:4.36

Well Casing Volume Conversion

Well diameter (inches) = gallons per foot 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Well Information

Well Location:

Condition of Well:

Well Completion: NA

Well Locked at Arrival:

Well Locked at Departure:

Key Number To Well: NA

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 9/16/2021 5:25:50 AM -04:00

Project Number	30052922	**Well ID**	YAMW-3			**Date**	09/03/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	68.4 degrees F and Clear. The wind is blowing E at 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	81.45	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	36.41	**Total Depth (ft-bmp)**	91.44	**Water Column(ft)**	55.03	**Gallons in Well**	8.94
MP Elevation	796.05	**Pump Intake (ft-bmp)**	86	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	11:05	**Well Volumes Purged**	0.35	**Sample ID**	YAMW-3	**Sampled by**	Jake Swanson
Purge Start	08:49	**Gallons Purged**	3.10	**Replicate/ Code No.**		**Color**	Clear
Purge End	11:05						

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)
08:49:00	00:00	200	36.41	5.81	1163.27	122.38	8.66	20.4	161.60
08:54:00	05:00	200	36.96	5.79	1148.93	293.12	8.15	20.2	162.95
08:59:00	10:00	200	38.3	5.80	1163.93	122.90	8.87	20.3	166.66
09:04:00	15:00	150	38.62	5.80	1166.86	222.20	8.25	21.3	178.65
09:09:00	20:00	100	39	5.81	1160.39	868.74	8.58	22.0	186.85
09:14:00	25:00	100	39.22	5.82	1157.49	1010.24	8.26	23.1	191.73
09:19:00	30:00	100	39.44	5.81	1164.16	1545.20	8.06	24.5	193.95
09:24:00	35:00	100	39.61	5.81	1162.53	3837.86	8.44	25.0	197.76
09:29:00	40:00	100	39.83	5.80	1169.07	3285.00	8.16	25.3	200.17
09:34:00	45:00	100	39.98	5.80	1162.17	435.58	8.40	25.8	202.28
09:39:00	50:00	75	40.1	5.80	1158.83	100.83	8.39	25.1	205.61
09:44:00	55:30	75	40.23	5.79	1174.13	430.51	8.44	25.5	258.24
09:47:00	57:58	75	40.31	5.79	1174.37	614.42	8.12	26.0	280.31
09:51:00	02:08	75	40.43	5.79	1171.55	1347.03	7.82	26.3	277.31
09:56:00	07:08	75	40.54	5.79	1168.66	586.47	7.40	26.9	252.05
10:01:00	12:08	75	40.69	5.78	1154.34	1315.33	7.97	27.6	242.31
10:06:00	17:08	75	40.82	5.78	1163.58	1935.73	7.94	27.9	237.25
10:11:00	22:08	50	40.96	5.78	1172.51	860.86	7.67	27.9	234.30
10:16:00	27:08	50	41.02	5.78	1181.99	632.05	7.60	28.7	231.93
10:21:00	32:08	50	41.11	5.77	1171.97	2734.43	8.19	29.3	229.75
10:26:00	37:08	50	41.18	5.77	1169.71	2592.19	8.13	29.0	230.02
10:31:00	42:08	50	41.23	5.77	1171.20	6985.65	8.14	29.2	229.54
10:36:00	47:08	50	41.28	5.77	1170.09	2074.48	7.93	29.6	225.56
10:39:00	49:54	50	41.36	5.77	1175.09	193.76	7.80	29.9	240.90
10:42:00	53:28	50	41.43	5.76	1167.32	604.39	7.33	30.1	220.98

Groundwater Sampling Form

10:47:00	58:28	50	41.44	5.76	1166.17	1806.26	7.19	30.5	208.92
10:52:00	03:28	50	41.51	5.75	1161.33	1876.46	6.95	30.6	201.67
10:57:00	08:28	50	41.6	5.75	1156.64	2282.54	6.74	30.7	197.96
11:02:00	13:28	50	41.64	5.74	1166.91	5087.67	6.41	31.3	194.73

Constituent Sampled	Container	Number	Preservative
Metals	250 mL Plastic	1	HNO3
Chloride	250 mL Plastic	1	None

Comments: Lamotte turbidity readings (Time :NTU)
0854:46.8; 0859:35.1;0904:30.1; 0909:27.2; 0914:25.8; 0919:23.1; 0924:22.6; 0929:21.2; 0934:20.3; 0939:21.2; 0944:21.1; 0951:21.5; 0956:25.2; 1001:26.3; 1006:28.6; 1011:19.2; 1016:17.1; 1021:20.2; 1026:18.3; 1031:16.1; 1036:15.7; 1042:19.9; 1047:15.2; 1052:17.2; 1057:16.2; 1102:14.3

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

Project Number	30052922	**Well ID**	YGWA-21I			**Date**	09/01/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	84.6 degrees F and Partly Cloudy. The wind is blowing NW at 8.1 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)	31.34	**Total Depth (ft-bmp)**	79.9	**Water Column(ft)**	48.56	**Gallons in Well**	7.89
MP Elevation	783.7	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	14:40	**Well Volumes Purged**	0.26	**Sample ID**	YGWA-21I	**Sampled by**	Jake Swanson
Purge Start	13:47	**Gallons Purged**	2.05	**Replicate/ Code No.**		**Color**	Clear
Purge End	14:33						

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)
13:47:40	00:00	200	31.34	6.97	150.98	3.19	6.69	27.2	74.64
13:52:40	05:00	200	31.34	6.19	153.49	2.17	1.19	23.5	-5.81
13:57:40	10:00	200	32.99	6.15	161.18	2.17	0.58	22.8	-8.36
14:02:40	15:00	150	33.22	6.18	161.69	1.7	0.4	22	-13.95
14:07:40	20:00	150	33.38	6.14	162.27	1.76	0.43	23.7	-13.61
14:12:40	25:00	150	33.46	6.29	161.2	2	0.45	24.9	-22.9
14:17:40	30:00	150	33.51	6.5	160.05	2	0.41	25.4	-35.6
14:22:40	35:00	150	33.57	6.61	159.38	2.19	0.4	25.8	-41.41
14:27:40	40:00	200	33.63	6.63	158.55	2.33	0.39	25.7	-42.98
14:32:40	45:00	200	33.67	6.65	158.46	2.19	0.4	25.9	-44.37

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
Dissolved Metals	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3

Comments: Lamotte turbidity readings (Time:NTU) 1352:0.91; 1357:0.88; 1402:0.83; 1407:0.78; 1412:1.33; 1417:1.24; 1422:1.17; 1427:1.57; 1432:1.89

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

Project Number	30052922	**Well ID**	YGWC-23S			**Date**	08/25/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	It is Partly Cloudy. The wind is blowing S/SE at 5.8 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	28.61	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	16.72	**Total Depth (ft-bmp)**	38.91	**Water Column(ft)**	22.19	**Gallons in Well**	3.61
MP Elevation	764.91	**Pump Intake (ft-bmp)**	34	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:10	**Well Volumes Purged**	0.66	**Sample ID**	YGWC-23S	**Sampled by**	Jake Swanson
Purge Start	14:18	**Gallons Purged**	2.38	**Replicate/ Code No.**		**Color**	Clear
Purge End	15:10						

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)
14:18:27	00:00	200	16.72	5.55	234.86	77.6	7.35	25	183.49
14:23:27	05:00	200	17.12	5.46	240.41	80.55	7.47	28.1	192.73
14:28:27	10:00	200	17.21	5.48	238.2	49.42	7.24	28.2	196.99
14:33:27	15:00	200	17.25	5.49	236.25	22.43	6.95	28.6	201.21
14:38:27	20:00	200	17.25	5.48	230.73	12.17	6.72	29.2	204.27
14:43:27	25:00	200	17.25	5.48	228.89	8.7	6.77	28.4	207.56
14:48:27	30:00	200	17.25	5.47	223.5	12.46	6.77	28.5	210.03
14:53:27	35:00	200	17.25	5.47	222.72	17.9	6.73	28.2	212.42
14:58:27	40:00	200	17.25	5.46	220.16	27.09	6.74	28	215.54
15:03:27	45:00	200	17.25	5.46	218.15	37.73	6.64	27.9	217.2

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Dissolved Metals	500 mL Plastic	1	None
Alkalinity	250 mL Plastic	1	None

Comments: La Motte Turbidity Reading (time:NTU) 1423:30.1; 1428:17.9; 1433:13.2; 1438:9.78; 1443:7.21; 1448:5.20; 1453:3.50; 1458:2.66; 1503:2.24

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

Project Number	30052922	**Well ID**	YGWA-18S			**Date**	08/26/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	It is Clear. The wind is blowing SE at 4.7 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)	20.73	**Total Depth (ft-bmp)**	39.97	**Water Column(ft)**	19.24	**Gallons in Well**	3.13
MP Elevation	790.57	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	15:35	**Well Volumes Purged**	0.25	**Sample ID**	YGWA-18S	**Sampled by**	Jake Swanson
Purge Start	14:56	**Gallons Purged**	0.79	**Replicate/ Code No.**	AMA-EB-1 at 1600	**Color**	Clear
Purge End	15:26						

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)
14:56:15	00:00	100	20.73	5.96	88.85	3.79	7.23	26.1	182.52
15:01:15	05:00	100	21.38	4.72	58.9	2.98	2.13	20.1	226.42
15:06:15	10:00	100	21.46	4.44	58.61	2.64	1.49	19.7	247.7
15:11:15	15:00	100	21.52	4.38	58.45	3.37	1.37	19.5	255.47
15:16:15	20:00	100	21.53	4.37	58.47	3.86	1.28	19.4	259.69
15:21:15	25:00	100	21.54	4.38	58.51	4.43	1.25	19.3	262.81
15:26:15	30:00	100	21.54	4.4	58.46	3.44	1.22	19.3	265.07

Constituent Sampled	Container	Number	Preservative
Dissolved Metals	500 mL Plastic	1	None
Chloride	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3

Comments: La Motte Turbidity Reading (time:NTU) 1501:3.11; 1506:2.27; 1511:1.92; 1516:1.73; 1521:1.59; 1526:1.34

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

Project Number	30052922	**Well ID**	YGWA-17S			**Date**	08/27/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	It is Partly Cloudy. The wind is blowing E/SE at 8.1 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)	13.03	**Total Depth (ft-bmp)**	39.85	**Water Column(ft)**	26.82	**Gallons in Well**	4.36
MP Elevation	783.05	**Pump Intake (ft-bmp)**	35	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	10:45	**Well Volumes Purged**	0.24	**Sample ID**	YGWA-17S	**Sampled by**	Jake Swanson
Purge Start	10:17	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	10:37						

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)
10:17:11	00:00	200	13.03	5.37	84.83	1.38	3.47	19.5	193.95
10:22:11	05:00	200	13.03	5.23	84.29	1.03	2.12	19	204.09
10:27:11	10:00	200	13.59	5.21	85.73	2.04	1.76	18.9	207.76
10:32:11	15:00	200	13.59	5.22	86.35	5.73	1.67	19	211.6
10:37:11	20:00	200	13.59	5.27	87.13	9.38	1.62	18.9	211.67

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
Dissolved Metals	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3

Comments: La Motte Turbidity Reading (time:NTU) 1022:1.68; 1027:1.34; 1032:1.49; 1037:1.29

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

Project Number	30052922	**Well ID**	YGWA-18I			**Date**	08/27/2021
Project Location	AMA AP-3, A, B and B'		**Weather(°F)**	75.6 degrees F and Clear. The wind is blowing NE at 3.4 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)	23.92	**Total Depth (ft-bmp)**	79.97	**Water Column(ft)**	56.05	**Gallons in Well**	9.11
MP Elevation	790.57	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	09:35	**Well Volumes Purged**	0.12	**Sample ID**	YGWA-18I	**Sampled by**	Jake Swanson
Purge Start	09:11	**Gallons Purged**	1.06	**Replicate/ Code No.**		**Color**	Clear
Purge End	09:33						

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)
09:11:13	00:00	200	23.92	6.45	137.04	3.97	6.98	21.8	164.86
09:16:13	05:00	200	24.29	5.48	111.75	0.84	3.67	18.2	189.87
09:21:13	10:00	200	24.3	5.34	110.7	0.75	3.67	17.9	199.82
09:26:13	15:00	200	24.31	5.35	110.9	0.67	3.68	17.8	201.94
09:31:13	20:00	200	24.33	5.4	110.58	0.65	3.74	18	201.92

Constituent Sampled	Container	Number	Preservative
Chloride	250 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Metals	250 mL Plastic	1	HNO3
Dissolved Metals	500 mL Plastic	1	None

Comments: Stand alone turbidity reading (time:NTU) 1022:1.21; 1027:0.97; 1032:0.62; 1037:0.55

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 : 9/30/2021 5:42:49 PM EST

Project Number	30052923	**Well ID**	YGWC-43	**Date**	09/27/2021
Project Location	AMA R6 CCR Landfill	**Weather(°F)**	It is Clear. The wind is blowing undefined at 0.0 mph.		

Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.16	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	23.71	**Total Depth (ft-bmp)**	79.6 6	**Water Column(ft)**	55.95	**Gallons in Well**	9.09
MP Elevation	744.96	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:12	**Well Volumes Purged**		**Sample ID**	YGWC-43	**Sampled by**	Auguste Parrinello
Purge Start	11:35	**Gallons Purged**		**Replicate/ Code No.**		**Color**	Clear
Purge End	12:28						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
11:40	00:00	250	23.71	5.93	0.245	4.3	0.71	17.9	16.9
11:45	05:00	250	24.10	6.04	0.167	1.87	0.33	17.8	-6.3
11:55	10:00	250	24.10	6.08	0.167	1.7	0.24	17.7	-11.7
12:00	15:00	250	24.10	6.10	0.168	0.99	0.26	17.7	-13.4
12:05	20:00	250	24.10	6.10	0.169	0.49	0,25	17.8	-13.0
12:10	25:00	250	24.10	6.08	0.169	0.44	0.25	17.8	-13.0

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1 L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: No access with Vehicle. Battery required.

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 Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-37D
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:47:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-2
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:51:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-36A
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:22:00

			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:				
	Correct sediment slope around qell				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-17S
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	11:14:00

			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 overgrown. Needs to be cleared				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-04S
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	15:35:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-6I
Person Gauging:	Becky Steever
Date:	8/16/2021
Time:	10:53:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YAMW-1
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:30:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-48
Person Gauging:	Jake Swanson
Date:	8/16/2021
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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-05S
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	15:37:00

			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:				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-06D
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	15:02:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-21I
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	16:06:00

			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:				
	Hornets nest				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-35
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:29:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-38
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:24:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-41
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:14:00

			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:				
	Remove trees around well				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-40
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:17:00

			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:				
	Eve Tati on needs to be cleared.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5I
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	15:42:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-5
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:37:00

			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:				
	Needs to be unburied. See photos.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-42
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:12:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWA-39
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:20:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-23S
Person Gauging:	Jake Swanson
Date:	8/25/2021
Time:	14:13:00

			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:				
	Replace well casing and bollards				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-4
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:12:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-24SA
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:39:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-04S
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	16:42:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	PZ-37
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	09:40:00

			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 is high. Needs to be mowed.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	PZ-51
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:16:00

			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:				
	Clear tall grass and vegetation around well. Brush is five feet tall around well.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YAMW-3
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:11:00

			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

Project Location:	AMA R6 CCR Landfill
Permit Number:	
Well ID:	YGWC-43
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:19:00

			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:				
	Brush is five feet tall. Needs to be cleared for H&S.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18I
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:51:00

			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:				
	Vegetation needs to be cleared				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-18S
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	11:09:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-5D
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	15:43:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-6S
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	15:12:00

			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

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWA-20S
Person Gauging:	Becky Steever
Date:	8/17/2021
Time:	15:53:00

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

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	PZ-24IA
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:36:00

			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:				
	Vegetation around well is the-5 feet high. Needs to be cleared and mowed.				
8	Date by when corrective actions are needed:				

Groundwater Gauging Well Inspection Report

ARCADIS

Project Location:	AMA AP-3, A, B and B'
Permit Number:	
Well ID:	YGWC-49
Person Gauging:	Jake Swanson
Date:	8/16/2021
Time:	10:43:00

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

Groundwater Sampling Form

Updated : 9/30/2021 5:42:49 PM -04:00

Project Number	30052923	**Well ID**	YGWC-43			**Date**	09/27/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	It is Clear. The wind is blowing undefined at 0.0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	69.16	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	23.71	**Total Depth (ft-bmp)**	79.66	**Water Column(ft)**	55.95	**Gallons in Well**	9.09
MP Elevation	744.96	**Pump Intake (ft-bmp)**	75	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:12	**Well Volumes Purged**		**Sample ID**	YGWC-43	**Sampled by**	Auguste Parrinello
Purge Start	11:35	**Gallons Purged**		**Replicate/ Code No.**		**Color**	Clear
Purge End	12:28						

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)
11:40:00	0	250	23.71	5.93	245.00	4.30	0.71	17.9	16.90
11:45:00	5	250	24.1	6.04	167.00	1.87	0.33	17.8	-6.30
11:55:00	15	250	24.1	6.08	167.00	1.70	0.24	17.7	-11.70
12:00:00	20	250	24.1	6.10	168.00	0.99	0.26	17.7	-13.40
12:05:00	25	250	24.1	6.10	169.00	0.49	0.25	17.8	-13.00
12:10:00	30	250	24.1	6.08	169.00	0.44	0.25	17.8	-13.00

Constituent Sampled	Container	Number	Preservative
TDS	500 mL Plastic	1	None
RAD Chem	1L Plastic	2	HNO3
Anions	250 mL Plastic	1	None
Metals	250 mL Plastic	1	HNO3

Comments: No access with vehicle. Battery required.

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

November/December

Delineation Well Sampling

November 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Augie Parrinello

Instrument Calibration

Date: 11/4/2021 Time: 11:03

Parameter	Units	Standard	YSI ProDSS SN 22186 Pre-Calibration	YSI ProDSS SN 22186 Post-Calibration
DO	% saturation	100	97	100.2
Conductivity	us/cm	1413	1399	1413
pH	S.U.	4.00	3.99	4.01
pH	S.U.	7.00	7.05	7.05
pH	S.U.	10.00	10.10	10.04
ORP	mV	240.0	251.0	243.0

Turbidity Standard	Units	Geotech SN 1808165
0.0	NTU	0.0
129.0	NTU	127.80

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

Groundwater Sampling Form

Updated : 11/15/2021 2:38:06 PM -05:00

Project Number	30052923	**Well ID**	PZ-52D			**Date**	11/04/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	46.4 degrees F and Cloudy. The wind is blowing 4.7 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	82	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	6.09	**Total Depth (ft-bmp)**	92	**Water Column(ft)**	85.91	**Gallons in Well**	13.96
MP Elevation	762.79	**Pump Intake (ft-bmp)**	90	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	12:41	**Well Volumes Purged**		**Sample ID**	PZ-52D	**Sampled by**	Auguste Parrinello
Purge Start	12:00	**Gallons Purged**		**Replicate/ Code No.**		**Color**	Clear
Purge End	13:09						

Time	Total Elapsed Minutes	Rate (mL/min)	Depth to Water (ft)	pH (standard units)	Specific Conductivity (µS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature °C	Redox (mV)
12:10:00		250	10.1	6.47	475.00	10.40	0.22	16.2	95.50
12:15:00	5	250	10.2	6.49	471.00	5.20	0.15	16.1	80.50
12:20:00	10	250	10.2	6.49	471.00	4.88	0.15	15.8	78.60
12:25:00	15	250	10.2	6.58	490.00	4.04	0.14	15.7	66.50
12:30:00	20	250	10.2	6.62	506.00	4.70	0.13	15.9	61.50
12:35:00	25	250	10.2	6.62	507.00	5.10	0.13	15.5	61.30
12:40:00	30	250	10.2	6.62	506.00	5.20	0.13	15.8	60.10

Constituent Sampled	Container	Number	Preservative
TDS	500ml plastic	1	None
APP III/IV metals	250 mL Plastic	1	HNO3
RAD Chem	1L Plastic	2	HNO3
Chloride,Flouride,Sulfate	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: 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 : 12/3/2021 12:50:42 PM -05:00

Project Number	30052923	**Well ID**	YAMW-3			**Date**	11/17/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	70 °F, Sunny, winds at 0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	81.45	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	37.03	**Total Depth (ft-bmp)**	91.44	**Water Column(ft)**	54.41	**Gallons in Well**	8.84
MP Elevation	796.05	**Pump Intake (ft-bmp)**	86	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	16:07	**Well Volumes Purged**		**Sample ID**	YAMW-3	**Sampled by**	Auguste Parrinello
Purge Start	13:25	**Gallons Purged**		**Replicate/ Code No.**	EB-01	**Color**	Clear
Purge End	16:15						

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)
13:25:00	0	300	38.4	5.73	1030.00	25.60	3.28	20.6	220.00
13:30:00	5	300	38.4	5.87	1010.00	35.70	1.86	20.7	208.00
13:35:00	10	300	38.4	5.99	997.00	12.50	1.41	20.8	200.00
13:40:00	15	300	38.4	6.00	1000.00	10.40	1.32	20.8	200.00
13:45:00	20	300	38.4	6.01	999.00	2.00	1.32	20.8	199.00

Constituent Sampled	Container	Number	Preservative
Dissolved Lithium	250 mL Plastic	1	HNO3
Total Lithium	250 mL Plastic	1	HNO3

Comments: Brown fouling entered at initial sample time. Continued purging until final turbidity was 2.77 ntu (under 5 ntu)

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

December 2021 Daily Calibration Log

Project Plant Yates

Field Staff: Grant Willford

Instrument Calibration

Date: 12/6/2021 Time: 07:48

Parameter	Units	Standard	YSI 556 SN RFW2210 Pre-Calibration	YSI 556 SN RFW2210 Post-Calibration
DO	% saturation	100	97	100.2
Conductivity	us/cm	1413	1393	1413
pH	S.U.	4.00	3.97	4.00
pH	S.U.	7.00	6.99	7.00
pH	S.U.	10.00	10.00	10.01
ORP	mV	240.0	241.8	240.0

Turbidity Standard	Units	Geotech SN 1808165
0.0	NTU	0.04
20.0	NTU	22.00
100.0	NTU	101.00
800.0	NTU	795.00

Notes:

DO - Dissolved Oxygen; us/cm - microsiemens/centimeter; ORP - oxidation-reduction potential; mV - millivolts; NTU - Nphelometric Turbidity Units; NC - Not calibrated

Quick Cal solution standard is dependant on temperature and will fluctuate

NA = not used that day

Groundwater Sampling Form

ARCADIS Design & Consultancy for natural and built assets

Updated : 12/10/2021 11:40:33 AM -05:00

Project Number	30052923	**Well ID**	PZ-51			**Date**	11/17/2021
Project Location	AMA R6 CCR Landfill		**Weather(°F)**	70 °F, Sunny, winds at 0 mph.			
Measuring Pt. Description	Top of Inner Casing	**Screen Setting (ft-bmp)**	26.3	**Casing Diameter (in)**	2	**Well Casing Material**	PVC
Static Water Level (ft-bmp)	11.7	**Total Depth (ft-bmp)**	36	**Water Column(ft)**	24.3	**Gallons in Well**	3.95
MP Elevation	744.3	**Pump Intake (ft-bmp)**	34	**Purge Method**	Low-Flow	**Sample Method**	Low-Flow
Sample Time	17:48	**Well Volumes Purged**		**Sample ID**	PZ-51	**Sampled by**	Auguste Parrinello
Purge Start	16:55	**Gallons Purged**		**Replicate/ Code No.**		**Color**	Clear
Purge End	19:55						

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)
17:00:00		300	11.7	5.48	559.00	2.90	8.41	22.8	239.00
17:05:00	5	300	12.1	5.48	549.00	6.80	5.06	21.7	257.00
17:10:00	10	300	12.11	5.48	556.00	6.20	5.06	21.7	264.00
17:15:00	15	300	12.12	5.49	549.00	24.80	5.28	20.3	271.00
17:20:00	20	300	12.12	5.49	549.00	29.40	5.28	20.2	280.00
17:25:00	25	300	12.12	5.49	550.00	29.00	5.25	20.9	299.00
17:30:00	30	300	12.12	6.00	559.00	23.00	5.25	20.3	303.00
17:35:00	35	300	12.12	6.15	560.00	15.20	5.28	18.5	528.00
17:40:00	40	300	12.12	6.15	560.00	13.80	5.28	18.5	316.00
17:45:00	45	300	12.12	6.15	561.00	3.10	5.30	18.5	320.00

Constituent Sampled	Container	Number	Preservative
Lithium	250 mL Plastic	1	HNO3

Comments: Drive up access.

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

ARCADIS

GROUNDWATER SAMPLING FORM

Project No. 30052922 Well ID YAMW-3 Date 12/9/2021

Project Name/Location Plant Yates GAC Weather Partly Cloudy

Measuring Pt. Description btoc Screen Setting (ft bgs) 78-88 ft bgs Casing Diameter (in.) 2" Well Material X PVC ___ SS

Static Water Level (ft bmp) 37.45 @ 1060 ft btoc Total Depth (ft bmp) 92 ft btoc Water Column (ft) 54.55 Gallons in Well 8.72

MP Elevation N/A Pump Intake (ft bmp) ~88 ft bgs Purge Method: Bladder Pump / Centrifugal / Submersible / Other / Sample Method Low flow

Pump On/Off 1205 / 1627

Sample Time: 1615 Volumes Purged X Sample ID ___ Sampled by CW

Purge Start 1115 Gallons Purged ___ Replicate/Code No. N/A

Purge End 1627

Time	Minutes Elapsed	Rate (gpm/mL/min) 200mL high +	Depth to Water (ft) -0.3	Gallons Purged (mL)	pH ± 0.1	Cond. (uMhos/cm/mS/cm) ± 3%	Turbidity (NTU) ± 10%	DO (mg/L) ± 10%	Temp. (°C/°F) ± 3%	Redox (mV) ± 10mV	Appearance Color	Appearance Odor
1112	Begin purging through flow through cell @ 150 mL/min											
1115	3	150 mL/min	37.44	450	5.79	667	106	3.81	15.4	124.4	Clear	none
1145	33	150 mL	39.40	4,950	5.79	642	101	2.54	15.7	123.4	cloudy	none
1300	Reduced flow to 50mL/min to reduce turbidity											
1330	103	50mL	40.21	8,250	5.82	680	48.5	2.69	16.0	190.0	Slightly cloudy	none
1400	133	50mL	40.61	9,750	5.86	698	40.9	2.77	15.4	71.8		
1422		50mL	40.70	10,950	5.86	695	30.7	2.49	15.3	59.1		
1422	Pump off, raised pump to ~86 ft bgs ~4 ft btoc WL 40.70 ft btoc											
1430	Trouble shoot control box											
1445	Resumed purging ~300 mL/min											
1500		300	41.52	14,550	5.82	695	100	2.25	15.9	108.5	cloudy	none
1510		300	42.79	19,050	5.81	692	106	2.30	15.6	139.4		
1510	Pump off, lower to mid screen; lower flow											
	Stabilization Calculations (1)											
	Stabilization Criteria				± 0.1 s.u.	±3%	±10% or within 1 NTU (1)	± 10%	±3%	±10 mV		

(1) Turbidity < 50 NTU and ±10% or within 1 NTU of a previous reading when <10 NTU

Constituents Sampled	Container	Number	Preservative
See Page 2			

Comments See page 2

Well Casing Volumes

Gallons/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:	Yes / No
Condition of Well:		Well Locked at Departure:	Yes / No
Well Completion:	Flush Mount / Stick Up	Key Number To Well:	

GROUNDWATER SAMPLING FORM

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Page 2 of 2

Project No. 30052922 Well ID YAMW-3 Date 12/9/2021

Project Name/Location GLC Plant Yates Weather

Measuring Pt. Description ft btoc Screen Setting (ft bmp) 78-88 ftbgs Casing Diameter (in.) 2" Well Material X PVC ___ SS

Static Water Level (ft bmp) 37.90 @ ftbtoc Total Depth (ft bmp) 92.4 btoc Water Column (ft) 54.85 Gallons in Well 8.72

MP Elevation N/A Pump Intake (ft bmp) ~88 ftbgs Purge Method: ___ Centrifugal ___ Submersible ___ Other Sample Method Low flow

Pump On/Off 1205/1627

Sample Time: 1615 Volumes Purged X

Purge Start 1415 Gallons Purged ~16.2 gallons Sample ID ___ Sampled by GW

Purge End 1627 Replicate/Code No. ___

SampleID: YAMW-3-W-12092021

Time	Minutes Elapsed	Rate (gpm/(mL/min) 200mL/min =	Depth to Water (ft) -0.3	Gallons Purged	pH ± 0.1	Cond. (uMho/(mS/cm) ± 3%	Turbidity (NTU) ± 10%	DO (mg/L) ± 10%	Temp. (°C/(°F) ± 3%	Redox (mV) ± 10mV	Appearance Color	Appearance Odor
1513	Resumed purging @ N				50mL/min							
1533		50mL/min	41.35	21.350	5.84	635	88.1	2.01	14.7	85.9	Brown	none
1553		50mL/min	41.40	21.850	5.90	646	19.6	2.34	15.7	41.7	"	"
1603		50mL/min	41.65	22.350	5.92	643	15.2	2.31	15.8	40.3	Clear	none
1613		"	41.79	23.350	5.92	641	14.5	2.28	15.6	40.3	"	"
1615	Began sampling											
1627	Pump off											

Stabilization Calculations (1)								
Stabilization Criteria	± 0.1 s.u.	±3%	± 10% or within 1 NTU (1)	± 10%	±3%	±10 mV		

(1) Turbidity < 50 NTU and: ±10% or within 1 NTU of a previous reading when <10 NTU

Constituents Sampled	Container	Number	Preservative
Total Li	250mL	1	HNO3
Dissolved Li	"	1	"
Field Blank Li: Ambient Air	"	1	"
Equipment Blank from Hubber pump	"	1	"

Comments * Field Blank ID: ~~Field Blank~~ FB-01-12092021 Equipment Blank ID: EB-01-12092021

Well Casing Volumes

Gallons/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:	Active Land Fill	Well Locked at Arrival:	(Yes) / No
Condition of Well:	Good	Well Locked at Departure:	(Yes) / No
Well Completion:	Flush Mount / (Stick Up)	Key Number To Well:	

Appendix C

Well Installation Reports

June 2021

PZ-37D

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Georgia Power

GEORGIA POWER COMPANY PLANT YATES - AP-3/A/B/B' AND R6 LANDFILL

Groundwater Monitoring Well Installation Report

June 7, 2021

GEORGIA POWER COMPANY PLANT YATES - AP-3/A/B/B' AND R6 LANDFILL

Groundwater Monitoring Well Installation Report

Prepared for:

Georgia Power Company

Newnan, Georgia

Coweta County

Grant Willford
Geologist II

Geoffrey Gay, P.E.
Technical Expert / Project Manager

Prepared by:

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

Our Ref:

30086734

Date:

June 7, 2021

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APPENDICES

Professional Engineer Certification

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and have sufficient training and experience in groundwater hydrology and related fields as demonstrated by state registration and completion of accredited university courses that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction.

6-7-21

J. Geoffrey Gay, P.E.
Technical Expert
Georgia Registration No. 27801

Date

1 INTRODUCTION

Plant Yates is located at 708 Dyer Road on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line. Plant Yates (the Site) is approximately eight miles northwest of the city of Newnan and 13 miles southeast of the city of Carrollton. Plant Yates, once a coal-fired power generation facility converted to natural gas combustion turbines, occupies approximately 2,400 acres.

The objective of this report is to document the installation of a deep bedrock groundwater monitoring well (PZ-37D) adjacent to the existing shallow bedrock well (PZ-37). **Figure 1** depicts the configuration of ash ponds AP-A, AP-B, AP-B', AP-3, and the R6 CCR Landfill and the location of the monitoring wells. PZ-37D was installed on April 16, 2021. Well construction activities were performed in general accordance with the standards described in the RCRA Technical Enforcement Guidance Document (1986) and the Georgia Water Wells Standards Act of 1985.

2 DRILLING AND WELL INSTALLATION

The groundwater monitoring system is designed and installed according to accepted industry standards and following guidelines within the Manual for Groundwater Monitoring (GA EPD 1991). The location and depths of the monitoring wells were selected based on the characterization of site-specific hydrogeologic conditions by a qualified professional engineer and geologist. Groundwater monitoring location PZ-37D was designed to monitor the portion of the bedrock aquifer below PZ-37. The installation date, location, elevation, screen interval, and designation for PZ-37D is provided in the following sections. A copy of the Cascade Drilling Bond is included in **Appendix A**. Boring and Well Construction logs are provided in **Appendix B**. **Table 1** provides a summary of well construction.

2.1 Drilling Method

The piezometer was installed by Cascade Environmental under contract with Southern Company Services (SCS) Field Services. Cascade had a current and valid bond with the Water Wells Standards Advisory Council for the state of Georgia at the time of drilling and well installation.

The piezometer installation was performed under the oversight and direction of a Georgia Registered Professional Engineer with Arcadis. Borehole advancement drilling was completed using rotosonic drilling techniques. The drilling equipment consisted of a 150CC compact track mounted rotasonic drill rig equipped with four-inch sonic core rods with a six-inch outer-casing sleeve. During the drilling, continuous core samples were logged in the field for lithologic properties.

2.2 Screened Interval

Piezometer PZ-37D was screened in the bedrock zone. The monitoring well is constructed with ten feet of prepacked well screen. The screen was placed near the bottom of the borehole with a flush-threaded PVC end cap placed on the bottom of each well to provide a 0.4-foot sump/sediment trap.

2.3 Well Construction Materials

The piezometer well was designed and constructed to: (1) allow sufficient groundwater flow to the well for sampling; (2) minimize the passage of formation materials (turbidity) into the wells; and (3) ensure sufficient structural integrity to prevent collapse of the well. The well was constructed of 2-inch inside diameter Schedule 40 polyvinyl chloride (PVC) casing affixed to a dual-wall slotted 10-foot U-Pack® PVC screen. The U-Pack® well screens consist of a 3-inch diameter outer PVC well screen and a 2-inch centralized inner PVC well screen in one integrated unit. Factory slotted 0.010-inch screens were used. Southern Products and Silica filter pack sand size #1 (approximate 16-40 sieve size) was placed within the void space. The construction materials are ink-free, National Science Foundation (NSF) approved, and do not contain glues or solvents. Casing and screen sections are flush-threaded (ASTM-F-480).

2.3.1 Filter Pack

Following placement of the well screen and casing, the annular space adjacent to the well screen was filled with Southern Products and Silica filter pack sand size #1. This size sand is an approximately 16-40 sieve range, medium fine well-rounded quartz (silica) sand. Filter pack material was placed within the void space of the U-Pack® well screen and the annular space outside of the well screen extended approximately two feet above the top of the well screen. The depth of top of filter pack was measured and recorded in the well construction log provided in **Appendix A.**

After placing the filter pack and prior to installing the annular seal, the well was pumped for at least 30 minutes to ensure proper settlement of the filter pack. Prior to installing the annular seal, the depth to the filter pack was remeasured to ensure a minimum of two feet was present above the screen.

2.3.2 Annular Seal

An annular seal composed of approximately three feet of hydrated bentonite pellets was placed on top of the filter pack by slowly pouring the material down the borehole and tamping it into place with a tremie pipe. The bentonite was hydrated and allowed to cure prior to grouting the well.

Following hydration of the bentonite, the remaining annular space was tremie-grouted with a 30% solids bentonite grout (AQUAGARD®). The monitoring well surface completion consists of a locked, aluminum protective casing and a four-foot by four-foot by four-inch concrete pad.

2.3.3 Cap and Protective Casing

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

A weep hole was drilled in the outer protective casing near the bottom above the concrete pad. Pea gravel was placed inside the protective casing between the riser pipe and the outer casing. The well is marked with the proper well identification number on the stand-up casing.

3 WELL DEVELOPMENT

The monitoring well was initially developed using a combination of surging with a weighted bailer (1.6 inches x 36 inches) and pumping with a Grundfos Redi-Flo 2 submersible pump to minimize turbidity during groundwater sampling. The well was surged in 10-inch strokes across the well screen five times. Turbidity, pH, temperature, and conductivity measurements ensured that the well was fully developed. Final turbidity measurements following development were less than 5 NTUs before the well was developed dry. The development forms are included in **Appendix B**.

4 SURVEY

The monitoring well location and top of casing (TOC) elevations were surveyed by Arcadis. Horizontal survey locations are relative to the Georgia State Plane Coordinate System, West Zone, NAD83, US Survey Feet. All horizontal locations meet or exceed an accuracy of 0.50 foot. Vertical elevations are referenced to NAVD1988, US Survey Feet and meet an accuracy standard of 0.01 foot. A detailed survey report is included in **Appendix C.**

5 REFERENCES

Georgia Environmental Protection Division, Georgia Department of Natural Resources. Manual for Groundwater Monitoring, September 1991.

TABLE

Table 1 - Well Survey Data
Georgia Power Company
Plant Yates
Newnan, Georgia

Monument	Installation Date	Northing	Easting	Ground Elevation	Top of Casing Elevation (TOC)	Top of Screen Elevation	Bottom of Screen Elevation	Total Depth (ft bTOC)
PZ-37D	4/16/2021	1256478.32	2074688.08	758.8	761.12	568.8	558.8	202.3

Notes:
Elevation in U.S. Survey Feet (NAVD88)
Northing and Easting Georgia State Plane West, NAD83
Latitude and Longitude, WGS84

FIGURE

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

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-6S
YGWA-6I
PZ-06D
PZ-48
YGWC-49
ASH POND A
ASH POND 2
PZ-24IA
YGWC-24SA
PZ-35
YAMW-1
YGWC-36A
ASH POND B
ASH POND B'
YGWA-17S
PZ-51
YGWC-43
R6 ASH DISPOSAL AREA
YGWA-18S
YGWA-18I
YAMW-3
YGWC-42
YAMW-2
ASH POND 3
YAMW-4
YGWC-41
PZ-37D
PZ-37
YGWC-23S
YAMW-5
YGWC-38
ASH MANAGEMENT AREA
YGWA-40
YGWA-39
YGWA-21I
YGWA-20S
PZ-04S
YGWA-4I
PZ-05S
YGWA-5I
YGWA-5D

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

NOTE:
1. PZ-37D WAS INSTALLED AS A VERTICAL DELINEATION WELL FOR PZ-37 IN APRIL 2021.

2. AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

0 350 700 1,400
GRAPHIC SCALE IN FEET

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power
PLANT YATES
2021 SEMIANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WELL LOCATION MAP

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FIGURE
1

PATH:T:_ENV\GA_Power\GPC_Plant_Yates\MXD\2021\Semiannual_AMA\P2_Well_Map_AMA_v2.mxd DATE SAVED: 5/25/2021 4:27:16 PM LAST SAVED BY: tdrum

November 2021

PZ-52D and PZ-53D

ARCADIS

Georgia Power

GEORGIA POWER COMPANY PLANT YATES - AP-3/A/B/B' AND R6 LANDFILL

Groundwater Monitoring Well Installation Report (PZ-52D and PZ-53D)

November 29, 2021

GEORGIA POWER COMPANY PLANT YATES - AP-3/A/B/B' AND R6 LANDFILL

Groundwater Monitoring Well Installation Report (PZ-52D and PZ-53D)

Prepared for:

Georgia Power Company
Newnan, Georgia
Coweta County

Auguste Parrinello
Staff Geologist

Geoffrey Gay, P.E.
Technical Expert / Project Manager

Prepared by:

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Our Ref:

30086734

Date:

November 29, 2021

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APPENDICES

Professional Engineer Certification

I certify that I am a qualified groundwater scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and have sufficient training and experience in groundwater hydrology and related fields as demonstrated by state registration and completion of accredited university courses that enable me to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction.

J. Geoffrey Gay, P.E.
Technical Expert
Georgia Registration No. 27801

11.24.21
Date

1 INTRODUCTION

Plant Yates is located at 708 Dyer Road on the east bank of the Chattahoochee River in Coweta County, Georgia near the Coweta and Carroll County line. The Site is approximately eight miles northwest of the city of Newnan and 13 miles southeast of the city of Carrollton. Plant Yates, once a coal-fired power generation facility converted to natural gas combustion turbines, occupies approximately 2,400 acres. The objective of this report is to document the installation of a nested pair of deep bedrock groundwater monitoring wells (PZ-52D and PZ-53D) adjacent to the existing shallow bedrock well (PZ-37). **Figure 1** depicts the configuration of ash ponds AP-A, AP-B, AP-B', AP-3, and the R6 CCR Landfill and the location of the monitoring wells. PZ-52D and PZ-53D were installed on September 28, 2021. Well construction activities were performed in general accordance with the standards described in the RCRA Groundwater Monitoring Technical Enforcement Guidance Document (1986), the Georgia Water Wells Standards Act of 1985, and USEPA Region IV Science and Ecosystem Support Division Design and Installation of Monitoring Wells guidance SESDGUID-101-R2 (USEPA 2018).

2 DRILLING AND WELL INSTALLATION

The groundwater monitoring system is designed and installed according to accepted industry standards and following guidelines within the Manual for Groundwater Monitoring (GA EPD 1991). The location and depths of the monitoring wells were selected based on the characterization of site-specific hydrogeologic conditions by a qualified professional engineer and geologist. Groundwater monitoring locations PZ-52D and PZ-53D were designed to monitor the portion of the bedrock aquifer below PZ-37. The installation date, location, elevation, screen interval, and designation for PZ-52D and PZ-53D is provided in the following sections. A copy of the Cascade Drilling Bond is included in **Appendix A**. Boring and Well Construction logs are provided in **Appendix B**. **Table 1** provides a summary of well construction.

2.1 Drilling Method

The initial borehole (BH-52) for the monitoring wells was drilled by Cascade Environmental under contract with Southern Company Services (SCS) Field Services. Cascade had a current and valid bond (provided in **Appendix A**) with the Water Wells Standards Advisory Council for the state of Georgia at the time of drilling. SCS completed the installation of the monitoring wells PZ-52D and PZ-53D at the BH-52 location.

The well installation was performed under the oversight and direction of a Georgia Registered Professional Engineer with Arcadis. Borehole advancement drilling was completed using rotosonic drilling techniques. The drilling equipment consisted of a 150CC compact track mounted rotasonic drill rig equipped with 6-inch sonic core rods with 8-inch outer casing sleeve which drilled through the overburden and was socketed 10 feet into competent bedrock. A 6.25-inch surface casing was then grouted in place and allowed to cure for 24 hours. Following casing installation, 4-inch sonic core rods with a 6-inch outer-casing sleeve were used to advance through bedrock to the terminal depth. During the drilling, continuous core samples were logged in the field for lithologic properties.

2.2 Screened Intervals

Monitoring wells PZ-52D and PZ-53D were each screened in the bedrock zone. The initial borehole was advanced to 200 feet below ground surface (bgs) where the following downhole geophysical probes were used to collect data: 1) fluid temperature/resistivity probe; 2) three-arm caliper probe; 3) acoustic televiewer probe; 4) optical televiewer probe; and 5) vertical flow/heat pulse flow probe. Intervals for screening were selected following review of the geophysical data collected by Arcadis. The bottom 35 feet of the borehole was backfilled with bentonite chips prior to installing the wells.

Monitoring well PZ-53D is constructed with ten feet of standard well screen placed at the interval 150-160 feet bgs with a flush-threaded polyvinyl chloride (PVC) end cap placed on the bottom 0.4-foot sump/sediment trap. The annular space between PZ-53D and the shallower PZ-52D was backfilled up to 96 feet bgs with bentonite chips.

Monitoring well PZ-52D is constructed with ten feet of prepacked well screen placed at the interval 82-92 feet bgs with a flush-threaded PVC end cap placed on the bottom 0.4-foot sump/sediment trap.

2.3 Well Construction Materials

Each monitoring well was designed and constructed to: (1) allow sufficient groundwater flow to the well for sampling; (2) minimize the passage of formation materials (turbidity) into the wells; and (3) ensure sufficient structural integrity to prevent collapse of the well.

PZ-53D was constructed of 1-inch diameter schedule 40 PVC casing affixed to a 1-inch diameter machine-slotted 10-foot PVC screen. PZ-52D was constructed of 2-inch diameter Schedule 40 PVC casing affixed to a dual-wall slotted 10-foot U-Pack® PVC screen. The U-Pack® well screens consist of a 3-inch diameter outer PVC well screen and a 2-inch centralized inner PVC well screen in one integrated unit.

Factory slotted 0.010-inch screens were used. The construction materials are ink-free, National Science Foundation (NSF) approved, and do not contain glues or solvents. Casing and screen sections are flush-threaded (ASTM-F-480).

2.3.1 Filter Pack

Following placement of the well screen and casing, the annular space adjacent to the well screen was filled with FilterSil® filter pack sand size 0.85. This size sand is an approximately 12-30 sieve range, medium fine well-rounded quartz (silica) sand. Filter pack material was placed within the void space of the U-Pack® well screen and the annular space outside of the well screen extended approximately two feet above the top of the well screen. The depth to the top of filter pack was measured and recorded in the well construction log provided in **Appendix B.**

After placing the filter pack and prior to installing the annular seal, the well was pumped for at least 30 minutes to ensure proper settlement of the filter pack. Prior to installing the annular seal, the depth to the filter pack was remeasured to ensure a minimum of two feet was present above the screen.

2.3.2 Annular Seal

An annular seal composed of approximately 52 feet of hydrated bentonite was placed on top of the filter pack between PZ-53D and PZ-52D by slowly pouring the material down the borehole and tamping it into place with a tremie pipe. The bentonite was hydrated for 24 hours using formation water present and allowed to cure prior to installing PZ-52D. Approximately 39 feet of bentonite pellets were placed within the annular space above the two wells and allowed to hydrate using formation water.

Following hydration of the bentonite, the remaining annular space was tremie-grouted with a 30% solids bentonite grout (AQUAGARD®). The monitoring well surface completion consists of a locked, aluminum protective casing and a four-foot by four-foot by four-inch concrete pad.

2.3.3 Cap and Protective Casing

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

A weep hole was drilled in the outer protective casing near the bottom above the concrete pad. Pea gravel was placed inside the protective casing between the riser pipe and the outer casing. The well is marked with the proper well identification number on the stand-up casing.

3 WELL DEVELOPMENT

Monitoring wells PZ-52D and PZ-53D were initially developed using a combination of surging and pumping with a submersible pump, weighted bailer and peristaltic pump to minimize turbidity during groundwater sampling. The wells were surged in 24-inch strokes across the well screen ten times. Turbidity, pH, temperature, and conductivity measurements ensured that the well was fully developed. Final turbidity measurements following development were less than 10 NTUs. Well development forms are included in **Appendix B**.

4 SURVEY

The monitoring well location and top of casing (TOC) elevations were surveyed by Arcadis. Horizontal survey locations are relative to the Georgia State Plane Coordinate System, West Zone, NAD83, US Survey Feet. All horizontal locations meet or exceed an accuracy of 0.50 foot. Vertical elevations are referenced to NAVD1988, US Survey Feet and meet an accuracy standard of 0.01 foot. A detailed survey report is included in **Appendix C.**

5 REFERENCES

Georgia Environmental Protection Division, Georgia Department of Natural Resources. Manual for Groundwater Monitoring, September 1991.

United States Environmental Protection Agency (USEPA), Office of Solid Waste and Emergency Response. RCRA Ground-Water Monitoring Technical Enforcement Guidance Document OSWER 9950.1, September 1986.

United States Environmental Protection Agency (USEPA), Science and Ecosystem Support Division (SESD). Design and Installation of Monitoring Wells SESDGUID-101-R2, January 16, 2018.

TABLE

Table 1 - Well Construction Data
Georgia Power Company
Plant Yates
Newnan, Georgia

Monument	Installation Date	Northing	Easting	Ground Elevation	Top of Casing Elevation (TOC)	Top of Screen Elevation	Bottom of Screen Elevation	Total Depth (ft bTOC)
PZ-52D	9/28/2021	1256463.09	2074676.14	759.90	762.79	677.90	667.90	94.89
PZ-53D	9/28/2021	1256463.09	2074676.14	759.90	762.80	609.90	599.90	162.90

Notes:
Elevation in U.S. Survey Feet (NAVD88)
Northing and Easting Georgia State Plane West, NAD83

FIGURE

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

NOTE:
AERIAL IMAGE SOURCES: NOVEMBER 11, 2020 IMAGERY FLOWN AND PROCESSED BY SAM LLC; NATIONAL AGRICULTURE IMAGERY PROGRAM (NAIP) 2019 IMAGERY.

COORDINATE SYSTEM: NAD 1983 STATEPLANE GEORGIA WEST FIPS 1002 FEET

Georgia Power

PLANT YATES AP-3, A, B, B', AND R6 CCR LANDFILL
NEWNAN, GA
PZ-52D & PZ-53D WELL INSTALLATION REPORT

WELL LOCATION MAP

ARCADIS

FIGURE
1

APPENDIX A

Well Driller Performance Bond

intact INSURANCE

Power of Attorney

SEAL 1998

By

My Commission Expires January 31, 2025

SEAL 1998

CONTINUATION
CERTIFICATE

Atlantic Specialty Insurance Company

Bond No. 80033978

Date (Bond): 08-27-2017
(MONTH-DAY-YEAR)

Principal: Ricky Dean / Cascade Drilling L.P.
(Name)

Obligee: Department of Natural Resources, State of Georgia
(State)

Continuation is issued for the following bond period:

From: 06-30-2021
(MONTH-DAY-YEAR)

To: 06-30-2023
(MONTH-DAY-YEAR)

Amount: Forty Thousand and 00/100 Dollars ($40,000.00)

Description: Performance Bond for Water Well Contractors

PROVIDED, that this continuation certificate does not create a new obligation and is executed upon the express condition and provision that the Surety's liability under said bond and any and all Continuation Certificates issued in connection therewith shall not be cumulative and that the said Surety's aggregate liability under said bond and this and all such Continuation Certificates on account of all defaults committed during the period regardless of the number of years said bond has been and shall be in force, shall not in any event exceed the amount of said bond as hereinbefore set forth.

Signed and Executed: April 12th, 2021
(MONTH-DAY-YEAR)

Atlantic Specialty Insurance Company

By: Andrew P. Smith
Attorney-in-Fact - Andrew P. Smith

Parker, Smith & Feek, Inc
Agent

2233 112th Ave NE Bellevue, WA 98004
Business Address

425-709-3600
Telephone Number of Agent

Countersigned

APPENDIX B

Well Construction & Development Logs

ARCADIS

Boring No.: BH-52 (PZ-52D & PZ-53D)

Soil Boring and Construction Log

Sheet: 1 of 7

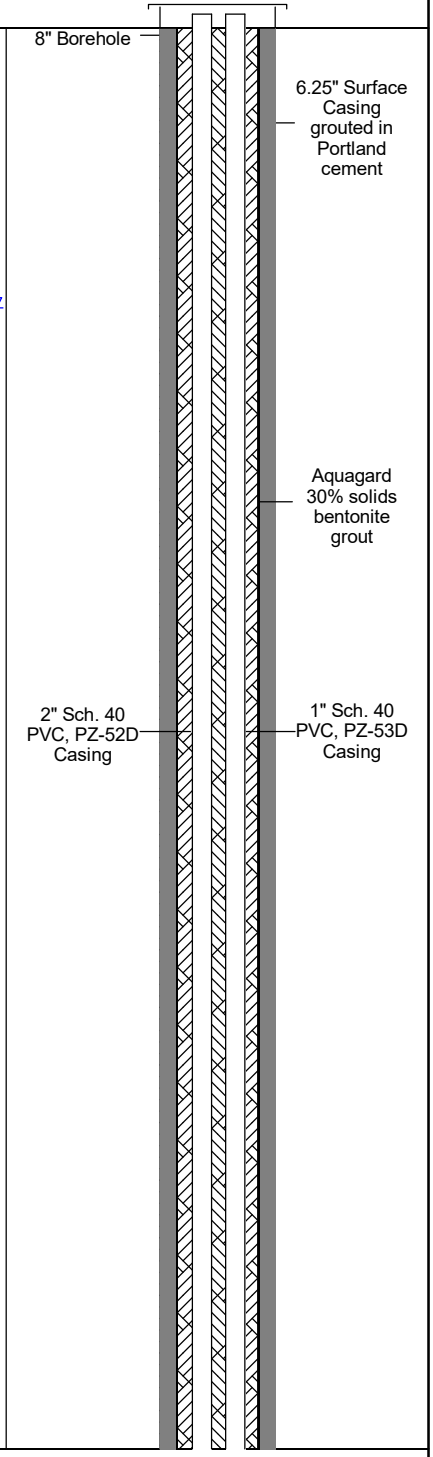
Client Name: Southern Company Services
Project Number: 30055278
Project Name: GPC Yates Drilling Oversight

Date Started: 08-18-2021
Date Completed: 09-28-2021
Total Depth: 200.0 ft bgs

Logger: Auguste Parrinello
Reviewer: Geoffrey Gay

Depth (feet)	Sample ID	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Optical Viewer
1–5		5			(0-17 ft) SAND, fine to coarse, subangular; some silt; trace clay; poorly sorted; moist; loose; 7.5YR 6/6 - reddish yellow; no odor; blocky structure; saprolite.	(0-5 ft) Hand Auger	
5–10		5				(5-55 ft) Drilled with water, Rough drilling	
10–15		5					
15–20		5			(17-20 ft) SAND, very fine to very coarse, subangular; little silt; little small to very large pebbles, angular; trace granules, angular; trace clay; poorly sorted; dry to moist; loose; 7.5YR 6/8 - reddish yellow; no odor; saprolite. NOTE: Pebbles are highly weathered. .		
20–25		5			(20-22 ft) SAND and CLAY, medium, subangular, medium plasticity, rapid dilatancy; little silt; well sorted; moist; dense; 7.5YR 4/3 - brown; no odor; homogeneous structure; saprolite. (22-24 ft) SAND, very fine to very coarse, angular to subangular; some silt; little granules, angular to subangular; little clay; poorly sorted; dry; loose; 7.5YR 6/8 - reddish yellow; no odor; blocky structure; saprolite.		
25–30		2			(24-30 ft) SAND, medium to coarse, angular to subangular; little small to very large pebbles, angular to subangular; little granules, angular to subangular; trace small to large cobbles, angular to subangular; trace silt; trace clay; poorly sorted; dry; loose; 10YR 8/2 - pale orange yellow; no odor; Saprolite/ weathered rock. NOTE: Clasts of mechanically broken weathered rock from drilling.		

Construction Details



Drilling Co.: Cascade
Driller: Cory Franklin, Mike Coleman
Drilling Method: Roto-Sonic
Drill Rig: Roto-Sonic
Remarks: Lithology modifiers: 'and' = 36-50% of total sample (by volume), 'some' = 21-35%, 'little' = 10-20%, and 'trace' = <10%.

Sampling Method: Sonic
Sampling Dimensions: Continuous
First Encountered Water (ft bgs): 5
Static Water Level (ft bgs): 5.91
Top of Casing Elev: 762.80
Surface Elev: 759.90
North Coor: 1256463.09
East Coor: 2074676.14

SOIL BORING AND CONSTRUCTION LOG C:\USERS\LWOODS\ONEDRIVE - ARCADIS\FULCRUM-GINT PROJECTS\CHEVRON CHARLOTTE\GINT PROJECT-C61SLP73.GPJ GINT DATA TEMPLATE.GDT 11/3/21

ARCADIS

Boring No.: BH-52 (PZ-52D & PZ-53D)

Soil Boring and Construction Log

Sheet: 2 of 7

Client Name: Southern Company Services
Project Number: 30055278
Project Name: GPC Yates Drilling Oversight

Date Started: 08-18-2021
Date Completed: 09-28-2021
Total Depth: 200.0 ft bgs

Logger: Auguste Parrinello
Reviewer: Geoffrey Gay

Depth (feet)	Sample ID	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Optical Viewer	Construction Details
31–63		10			(30-40 ft) Partially Weathered Rock, medium grained (0.25-0.5 mm) to coarse grained (0.5-2.0 mm), angular; White\\orange\\grey; 5Y 7/1 - light gray; highly weathered; medium hard (easily scratched by penknife); moderately fractured (0.1-0.3 m). NOTE: High m-f sand in cores accompanying broken rock fragments..	(5-55 ft) Drilled with water, Rough drilling		6.25" Surface Casing grouted in Portland cement; Aquagard 30% solids bentonite grout; 2" Sch. 40 PVC, PZ-52D Casing; 1" Sch. 40 PVC, PZ-53D Casing; 6" Borehole; Bentonite Pellets
40–63		10			(40-72 ft) Metamorphic Rock, medium grained (0.25-0.5 mm) to coarse grained (0.5-2.0 mm), angular; Grey/ white; fresh; very hard (cannot be scratched by penknife); moderately fractured (0.1-0.3 m); Chlorite, biotite, feldspars, quartz; pitted; Foliated Gneiss . NOTE: Micaceous, foliated.	(40-160 ft) Drilled with water, Drill rods chattering		
50–63		10						
60–63		10						

Remarks:

ARCADIS

Boring No.: BH-52 (PZ-52D & PZ-53D)

Soil Boring and Construction Log

Client Name: Southern Company Services
Project Number: 30055278
Project Name: GPC Yates Drilling Oversight

Date Started: 08-18-2021
Date Completed: 09-28-2021
Total Depth: 200.0 ft bgs

Logger: Auguste Parrinello
Reviewer: Geoffrey Gay

Depth (feet)	Sample ID	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Optical Viewer	Construction Details
64–96		10 / 10 / 10 / 10			(40-72 ft) Metamorphic Rock, medium grained (0.25-0.5 mm) to coarse grained (0.5-2.0 mm), angular; Grey/ white; fresh; very hard (cannot be scratched by penknife); moderately fractured (0.1-0.3 m); Chlorite, biotite, feldspars, quartz; pitted; Foliated Gneiss . NOTE: Micaceous, foliated. (72-100 ft) Metamorphic Rock, fine grained (0.06-0.25 mm) to coarse grained (0.5-2.0 mm), angular; Light grey; fresh; hard (difficult to scratch with penknife); intensely fractured (0.03-0.1 m); Chlorite, biotite, feldspars, quartz; Granitic-gneiss, foliated . NOTE: Fractures present causing yellow staining and increased localized weathering..	(40-160 ft) Drilled with water, Drill rods chattering		Bentonite Pellets 2" Sch. 40 PVC, PZ-52D Casing 1" Sch. 40 PVC, PZ-53D Casing 2" 0.1-Slot Upack double filter Screen FilterSil 0.85 12/30 filter sand Sch. 40 PVC End Cap

Remarks:

ARCADIS

Boring No.: BH-52 (PZ-52D & PZ-53D)

Soil Boring and Construction Log

Sheet: 4 of 7

Client Name: Southern Company Services
Project Number: 30055278
Project Name: GPC Yates Drilling Oversight

Date Started: 08-18-2021
Date Completed: 09-28-2021
Total Depth: 200.0 ft bgs

Logger: Auguste Parrinello
Reviewer: Geoffrey Gay

Depth (feet)	Sample ID	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Optical Viewer	Construction Details
97					(72-100 ft) Metamorphic Rock, fine grained (0.06-0.25 mm) to coarse grained (0.5-2.0 mm), angular; Light grey; fresh; hard (difficult to scratch with penknife); intensely fractured (0.03-0.1 m); Chlorite, biotite, feldspars, quartz; Granitic-gneiss, foliated . NOTE: Fractures present causing yellow staining and increased localized weathering..	(40-160 ft) Drilled with water, Drill rods chattering		
98		10						
99								
100								
101					(100-130 ft) Metamorphic Rock, fine grained (0.06-0.25 mm) to medium grained (0.25-0.5 mm), angular; Grey; fresh; hard (difficult to scratch with penknife); moderately fractured (0.1-0.3 m); Biotite, muscovite, quartz, feldspars, trace euhedral garnet; Foliated granitic gneiss .			
102								
103								
104								
105		10						
106								
107								
108								Bentonite Chips
109								
110								
111								
112								
113								1" Sch. 40 PVC, PZ-53D Casing
114								
115		10						
116								
117								
118								
119								
120								
121								
122								
123								
124								
125		10						
126								
127								
128								
129								

Remarks:

ARCADIS

Boring No.: BH-52 (PZ-52D & PZ-53D)

Soil Boring and Construction Log

Sheet: 5 of 7

Client Name: Southern Company Services
Project Number: 30055278
Project Name: GPC Yates Drilling Oversight

Date Started: 08-18-2021
Date Completed: 09-28-2021
Total Depth: 200.0 ft bgs

Logger: Auguste Parrinello
Reviewer: Geoffrey Gay

Depth (feet)	Sample ID	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Optical Viewer	Construction Details
130		10				(40-160 ft) Drilled with water, Drill rods chattering		
131					(130-140 ft) Metamorphic Rock, fine grained (0.06-0.25 mm), angular; Light grey; fresh; hard (difficult to scratch with penknife); slightly fractured (0.3-1 m); Biotite, muscovite, quartz, feldspars, garnet, pyrite ; Fine grained granitic gneiss. Finely Foliated.			
132								
133								
134								
135		10						
136								
137								Bentonite Chips
138								
139								
140								
141					(140-200 ft) Metamorphic Rock, fine grained (0.06-0.25 mm) to medium grained (0.25-0.5 mm), angular; fresh; hard (difficult to scratch with penknife); moderately fractured (0.1-0.3 m); Biotite, muscovite, quartz, feldspars, garnet, pyrite ; Foliated granitic gneiss.			
142								
143								
144								
145		10						
146								Bentonite Pellets
147								
148								
149								1" Sch. 40 PVC, PZ-53D Casing
150								
151								
152								
153								FilterSil 0.85 12/30 filter sand
154								
155		10						1" 0.1-Slot Sch. 40 PVC Screen
156								
157								
158								
159								
160								Sch. 40 PVC End Cap
161								
162								

Remarks:

ARCADIS

Boring No.: BH-52 (PZ-52D & PZ-53D)

Soil Boring and Construction Log

Sheet: 6 of 7

Client Name: Southern Company Services
Project Number: 30055278
Project Name: GPC Yates Drilling Oversight

Date Started: 08-18-2021
Date Completed: 09-28-2021
Total Depth: 200.0 ft bgs

Logger: Auguste Parrinello
Reviewer: Geoffrey Gay

Depth (feet)	Sample ID	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Optical Viewer	Construction Details
163					(140-200 ft) Metamorphic Rock, fine grained (0.06-0.25 mm) to medium grained (0.25-0.5 mm), angular; fresh; hard (difficult to scratch with penknife); moderately fractured (0.1-0.3 m); Biotite, muscovite, quartz, feldspars, garnet, pyrite ; Foliated granitic gneiss.			FilterSil 0.85 12/30 filter sand
164								
165								
166								
167					(167-168 ft) NOTE: Fine grained mafic intrusion. Foliated.			
168								
169								
170								
171								
172								
173								
174								
175								
176								
177								
178								
179								
180								Bentonite Chips
181								
182								
183								
184								
185								
186								
187								
188								
189								
190								
191								
192								
193								
194								
195								

Remarks:

ARCADIS

Boring No.: BH-52 (PZ-52D & PZ-53D)

Soil Boring and Construction Log

Sheet: 7 of 7

Client Name: Southern Company Services
Project Number: 30055278
Project Name: GPC Yates Drilling Oversight

Date Started: 08-18-2021
Date Completed: 09-28-2021
Total Depth: 200.0 ft bgs

Logger: Auguste Parrinello
Reviewer: Geoffrey Gay

Depth (feet)	Sample ID	Rec. (ft)	PID (ppm)	Graphic	Description	Drilling Fluid and Notes	Optical Viewer	Construction Details
196					(140-200 ft) Metamorphic Rock, fine grained (0.06-0.25 mm) to medium grained (0.25-0.5 mm), angular; fresh; hard (difficult to scratch with penknife); moderately fractured (0.1-0.3 m); Biotite, muscovite, quartz, feldspars, garnet, pyrite ; Foliated granitic gneiss.			Bentonite Chips
197								
198								
199								
200					200 ft. bgs End of Boring			
201								
202								
203								
204								
205								
206								
207								
208								
209								
210								
211								
212								
213								
214								
215								
216								
217								
218								
219								
220								
221								
222								
223								
224								
225								
226								
227								
228								

Remarks:

ARCADIS

Well Development Log

Date 10/12/21 Page 1 of 1

Site/Well No.: P2-52D

Project Name: AMA-EG Project No. 3010 2869 Time Begin 1150

Project Location: NEWNAN GA Time End

Weather CLEAR Development Personnel: Angie Perrine/lo

Evacuation Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	82-92
MP Elevation (ft)	NA	Pumping Rate (gpm)	2 gpm / 500 mL/min
Land Surface Elevation (ft)	NA	Evacuation Method	WHALE / PERI / BAILER
Sounded Well Depth (ft bmp)	92.4		
Depth to Water (ft bmp)	5.76		
Water-Level Elevation (ft)	NA	**Field Parameters**	
Water Column in Well (ft)	86.64	Color	CLEAR
Casing Diameter/Type	2	Odor	NO
Gallons in Well	15.83	Appearance	CLEAR
4 Casings	16.60		

Time of Day	Depth to Water (ft TOC)	Volume Withdrawn (mL/L) (gallon)	Well Volumes Removed	Temperature (°C)	pH (s.u.)	Conductivity (mS/cm)	Dis O_2 (mg/L)	Turbidity (NTU)
1150	START	~2 gpm (Brown/grey)						>1000
1210	PUMP	~30	~2	—	—	—	—	—
1215	SWAP TO PERI SURGE			10x	CLEAR SEDIMENT W/ BAILER			
1400	Switch to Peri pump. START				500 mL			>1000
1420	27.5	45	2.81	20.1	6.62	516	0.50	45.9
	SURGE	10x	254 STROKES W/ BAILER					
1500	27.85	60	3.61	19.7	6.29	531	0.37	35.3
1530	27.85	75	4.51	20.2	6.21	572	0.54	15.0
1600	27.85	90	5.42	20.1	6.21	542	0.35	14.8
1630	27.71	105	6.32	20.5	6.17	544	0.28	8.8

ARCADIS Design & Consultancy for natural and built assets

Well Development Log

Date 10/12/21 Page 1 of 1

Site/Well No.: P2-350

Project Name: ANIA-LEG Project No. 50102869 Time Begin 1100

Project Location: NEWNAN GA Time End 1585

Weather CLEAR Development Personnel ARCADIS PERSONNEL

Evacuation Data

Measuring Point	Top of Casing	Pump Intake Setting (ft bmp)	150-160
MP Elevation (ft)	NA	Pumping Rate (gpm)	500
Land Surface Elevation (ft)	NA	Evacuation Method	PUMP / BAFFLE
Sounded Well Depth (ft bmp)	160.21		
Depth to Water (ft bmp)	6.24		
Water-Level Elevation (ft)	NA	**Field Parameters**	
Water Column in Well (ft)	153.97	Color	CLEAR
Casing Diameter/Type	1"/PVC	Odor	NO
Gallons in Well (Liters)	6.30 / 7.56	Appearance	CLEAR

Time of Day	Depth to Water (ft TOC)	Volume Withdrawn (Liters / gallons)	Well Volumes Removed	Temperature (°C)	pH (s.u.)	Conductivity (mS/cm)	Dis O_2 (mg/L)	Turbidity (NTU)
1112	START PUMP 500 mL/min					(ORANGE)		>1000
1135	6.91	11.5	1.52	18.7	6.78	455.1	0.64	0.69
LD	SURGE SCREEN WITH BAFFLE.							>1000
	10 x 2 ft STROKE.							
1300	6.54	18.5	2.44	18.7	6.99	423.6	0.37	15.4
LD	SURGE SCREEN WITH BAFFLE.							
	10x 2ft STROKE.							
1330	6.1	28.5	3.76	18.6	7.03	446.1	0.24	2.19

APPENDIX C

Well Survey Report

Arcadis U.S., Inc.
1210 Premier Drive
Suite 200
Chattanooga
Tennessee 37421
Tel 423 756 7193
Fax 423 756 7197
www.arcadis-us.com

Ms. Lauren Coker
Southern Company
Environmental Solutions
241 Ralph McGill Blvd, NE
Atlanta, GA 30308

Date:
November 15, 2021

Contact:
Cory Williams, RLS

Phone:
919.415.2348

Email:
cory.williams@arcadis.com

Our ref:
30086734

Subject:
Piezometer Survey – PZ-52D, PZ-53D & YGWC-23S
Plant Yates, 708 Dyer Road, Newnan, Georgia

Dear Ms. Coker:

Attached is a copy of the survey report for Piezometers PZ-52D, PZ-53D and YGWC-23S at Plant Yates.

We appreciate the opportunity to work with Georgia Power and look forward to working with you in the future. If you need additional information, please feel free to contact me.

Sincerely,

Arcadis U.S., Inc.

A. Cory Williams, RLS
Survey Department Manager

Attachments

Copies:
Geoffrey Gay, PE

DESCRIPTION AND SCOPE

Arcadis performed horizontal and vertical field survey locations of the existing well networks, including all monitoring wells and piezometers. The Arcadis field survey team obtained horizontal and vertical locations for the top of the well casing (TOC) and surveyed the nail located on the concrete pad around the well. Where no nail was present, the field crew surveyed the top of the concrete well pad.

The Arcadis field team utilized a combination of Leica GS16 Global Positioning System (GPS) with traditional Leica MS60 Robotic Total Station field survey equipment and methods to obtain horizontal locations of the TOC and/or nail or top of the concrete well pad. All horizontal field survey locations are relative to the Georgia State Plane Coordinate System, West Zone, NAD1983, US Survey Feet. All horizontal locations meet or exceed an accuracy level of 0.50 foot. All vertical field survey locations were obtained from a level loop, performed with the Leica DNA03 digital level.

Next, we began from a benchmark set by utilizing GPS Static Session with an OPUS solution and subsequently verified via the eGPS RTN Network and ran through all well and piezometer locations to close on the beginning benchmark to confirm accuracy. All vertical elevations are referenced to NAVD1988, US Survey Feet and meet an accuracy standard of 0.01 foot.

See the attached exhibit detailing the surveyed location for Piezometers PZ-52D, PZ-53D and YGWC-23S.

CERTIFICATION

I, A. Cory Williams, being a Georgia Licensed Professional Land Surveyor, in accordance with the Georgia Board of Professional Engineers and Land Surveyors do hereby certify that the information contained herein is true and correct and has been prepared in accordance with generally accepted good land survey practices under my supervision, and the data is reliable to a horizontal accuracy of 0.5 foot and an elevational accuracy of 0.01 foot for each surveyed point.

FINAL REVIEW:

A. Cory Williams, RLS DATE: November 15, 2021

A. Cory Williams, RLS
1210 Premier Drive, Suite 200
Chattanooga, TN 37421
919.415.2348

EXHIBIT 1

Plant Yates – AMA Monitoring Well and Piezometer Surveys

Monument	Concrete Base Point	NAVD88 Elevation	Georgia State Plane Grid (NAD83), West Zone		WGS84 Latitude	Longitude
			Northing	Easting		
PZ-52D (added 10/20/21)	Casing	762.79	1256463.09	2074676.14	33° 27' 07.427" N	84° 53' 39.198" W
	PK Nail	760.04	1256463.75	2074675.04		
	Ground	759.90				
PZ-53D (added 10/20/21)	Casing	762.80	1256463.09	2074676.14	33° 27' 07.427" N	84° 53' 39.198" W
	PK Nail	760.04	1256463.75	2074675.04		
	Ground	759.90				
YGWC-23S (added 10/20/21)	Casing	764.95	1256366.93	2074734.07	33° 27' 06.479" N	84° 53' 38.506" W
	PK Nail	761.74	1256367.40	2074734.44		
	Ground	762.00				

Notes:
NAD83(2011) coordinates established by utilizing eGPS VRS & OPUS Solutions
Elevations derived from Arcadis BM#1 (El. 758.24)
Elevations & coordinates are U.S. Survey feet

Arcadis U.S., Inc.

2839 Paces Ferry Road

Suite 900

Atlanta, Georgia 30339

Tel 770 431 8666

Fax 770 435 2666

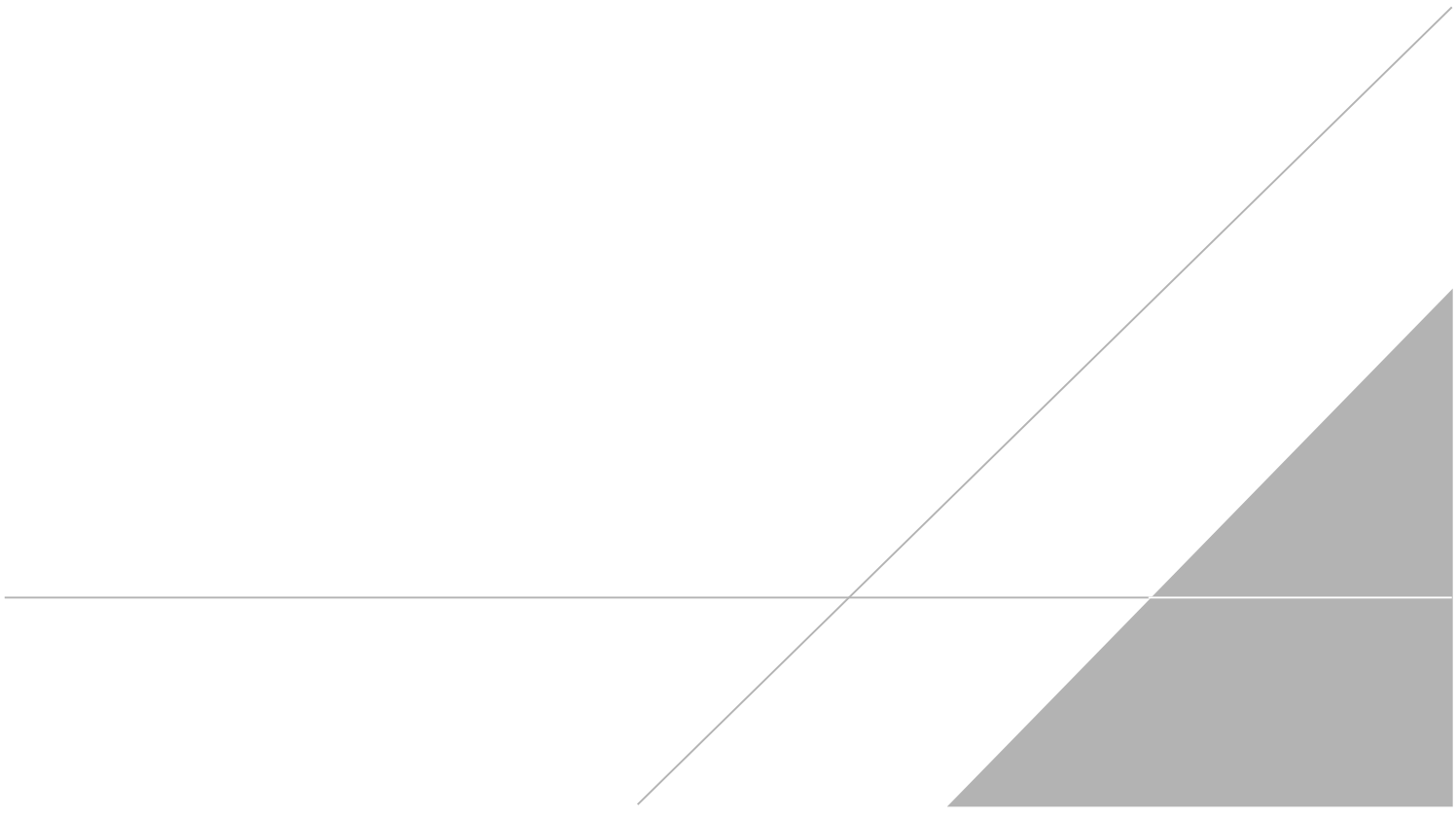
www.arcadis.com

Appendix D

Analytical Laboratory Data and Validation Reports (February, March, August, September, November 2021)

February 2021

Scan Event



ARCADIS

Georgia Power Co. – Plant Yates

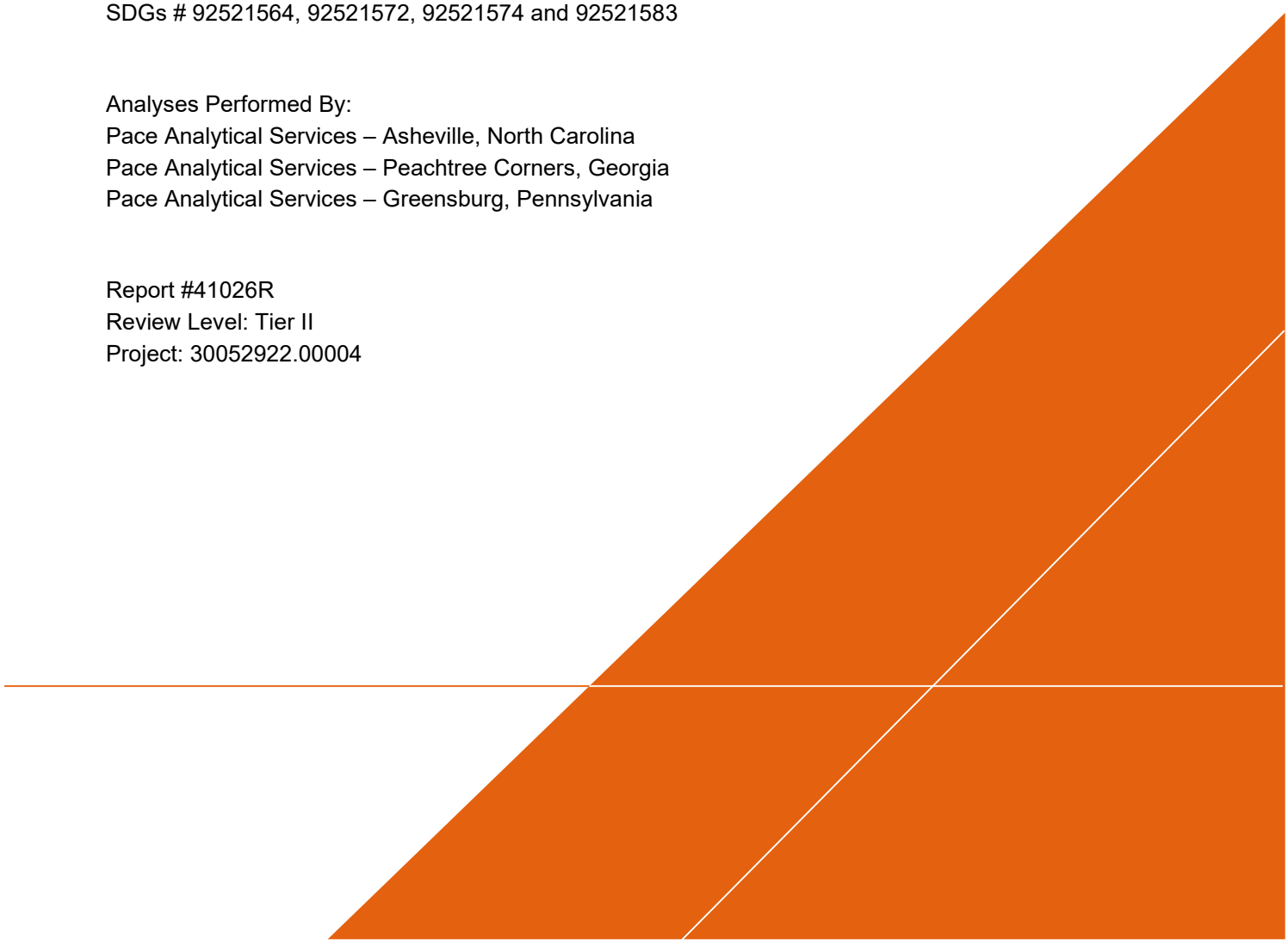
DATA REVIEW

Metals, Radium, and General Chemistry Analyses

SDGs # 92521564, 92521572, 92521574 and 92521583

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

Report #41026R
Review Level: Tier II
Project: 30052922.00004



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 92521564, 92521572, 92521574 and 92521583 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:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92521564 92521574	YGWC-38	92521564-1 92521574-1	Water	02/09/21		X	X	X
	YGWC-41	92521564-2 92521574-2	Water	02/10/21		X	X	X
	YGWC-42	92521564-3 92521574-3	Water	02/10/21		X	X	X
	YGWC-43	92521564-4 92521574-4	Water	02/09/21		X	X	X
	EB-01	92521564-5 92521574-5	Water	02/10/21		X	X	X
	YGWC-23S	92521564-6 92521574-6	Water	02/09/21		X	X	X
	YGWC-49	92521564-7 92521574-7	Water	02/09/21		X	X	X
	YGWC-24SA	92521564-8 92521574-8	Water	02/09/21		X	X	X
	DUP-02	92521564-9 92521574-9	Water	02/09/21	YGWC-24SA	X	X	X
	YGWC-36A	92521564-10 92521574-10	Water	02/10/21		X	X	X
92521572 92521583	PZ-37	92521572-1 92521583-1	Water	02/09/21		X	X	X
	YAMW-2	92521572-3 92521583-3	Water	02/09/21		X	X	X
	YAMW-4	92521572-4 92521583-4	Water	02/09/21		X	X	X
	YAMW-5	92521572-5 92521583-5	Water	02/09/21		X	X	X
92521572	YAMW-1	92521572-6	Water	02/09/21		X	X	X

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92521583		92521583-6						
	PZ-35	92521572-7 92521583-7	Water	02/10/21		X	X	X

Notes:

1. Metals were performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (fluoride) analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of 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 (COC) 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, 9315, and 9320; Standard Method (SM) SM4500-H+ B and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January2017).

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

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

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - * Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reported sample detection 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 associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. 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
YGWC-41 YGWC-42 YGWC-36A	Lead (EB)	Detected sample results <RL and <BAL	“UB” at the RL

Note:

EB = Equipment blank

RL = Reporting limit

MB = Method Blank

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 performed on samples YGWC-38 and PZ-37 exhibited recoveries and RPDs within the control limits.

3.2 Laboratory Duplicate Analysis

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

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-24SA / DUP-02	Barium	0.031	0.030	AC
	Beryllium	0.00013 J	0.00014 J	AC
	Chromium	0.0011 J	0.0013 J	AC
	Lead	0.00036 J	0.00036 J	AC

Note:

AC = Acceptable

The RPD between the parent samples and the field duplicate samples 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	
Field/Lab Duplicate (RPD)		X		X	
Reporting Limit Verification		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

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

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Fluoride by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

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

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

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD performed on sample DUP-02 for the fluoride analysis exhibited recoveries and RPDs within the control limits.

All analytes associated with MS/MSD recoveries were within control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
YGWC-38	Fluoride	146%	142%

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

3.2 Laboratory Duplicate Analysis

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

Laboratory duplicate analysis was not performed using a sample from this SDG.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-24SA / DUP-02	Fluoride	0.10 U	0.10 U	AC

Notes:

AC = Acceptable

The RPD between the parent samples and the field duplicate samples were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

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

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SM4500-H+ B and 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 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	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R Percent recovery

RPD Relative percent difference

RADIOLOGICAL ANALYSES

1. Holding Times

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

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

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

Blank results should be verified to be accurately reported and that tolerance limits (+/- 2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

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

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

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

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

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of < +/- 3 sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x_0 = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between +/-3 sigma. Warning limits have been established as +/- 2 sigma.

The MS/MSD performed on sample YGWC-38 exhibited recoveries and RPDs within the control limits.

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:

$$Z_{lab} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

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.

A laboratory duplicate was not included in the data package.

4. Field Duplicate Analysis

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

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

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. For results greater than five times the MDC, a control limit of 35 percent for water matrices is applied to the RPD between the parent and field duplicate sample results. If the parent and field duplicate sample results are less than five times the MDC, for water matrices a control limit of two times the MDC is applied to the difference between the results.

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

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-24SA / DUP-02	Radium-226	0.100 +/-0.114	0.153 +/-0.130	AC
	Radium-228	0.578 +/- 0.379	0.310 +/- 0.321	
	Total Radium	0.678 +/- 0.493	0.463 +/- 0.451	

Notes:

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD

AC = Acceptable

The RPD between the parent samples and the field duplicate samples were acceptable.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

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

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

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

The numerical performance indicator for a laboratory control sample is calculated

by:

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

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

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

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

LCS performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- YGWC-38 – Radium 228 and Total Radium
- YGWC-41 – Radium 226, Radium 228 and Total Radium
- YGWC-42 - Radium 226, Radium 228 and Total Radium
- EB-01 - Radium 226, Radium 228 and Total Radium
- YGWC-23S - Radium 226, Radium 228 and Total Radium
- YGWC-49 - Radium 226, Radium 228 and Total Radium
- YGWC-24SA - Radium 226, Radium 228 and Total Radium
- DUP-02 - Radium 226, Radium 228 and Total Radium
- YGWC-36A - Radium 226, Radium 228 and Total Radium
- YAMW-2 - Radium 226, Radium 228 and Total Radium
- YAMW-4 - Radium 226, Radium 228 and Total Radium
- YAMW-5 - Radium 228 and Total Radium
- YAMW-1 - Radium 226, Radium 228 and Total Radium
- PZ-35 - 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	
Gas-Flow Proportional System					
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)		X		X	
Laboratory Control Sample Duplicate (LCSD)		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	
Field/Lab Duplicate (RPD)		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Rachelle Borne

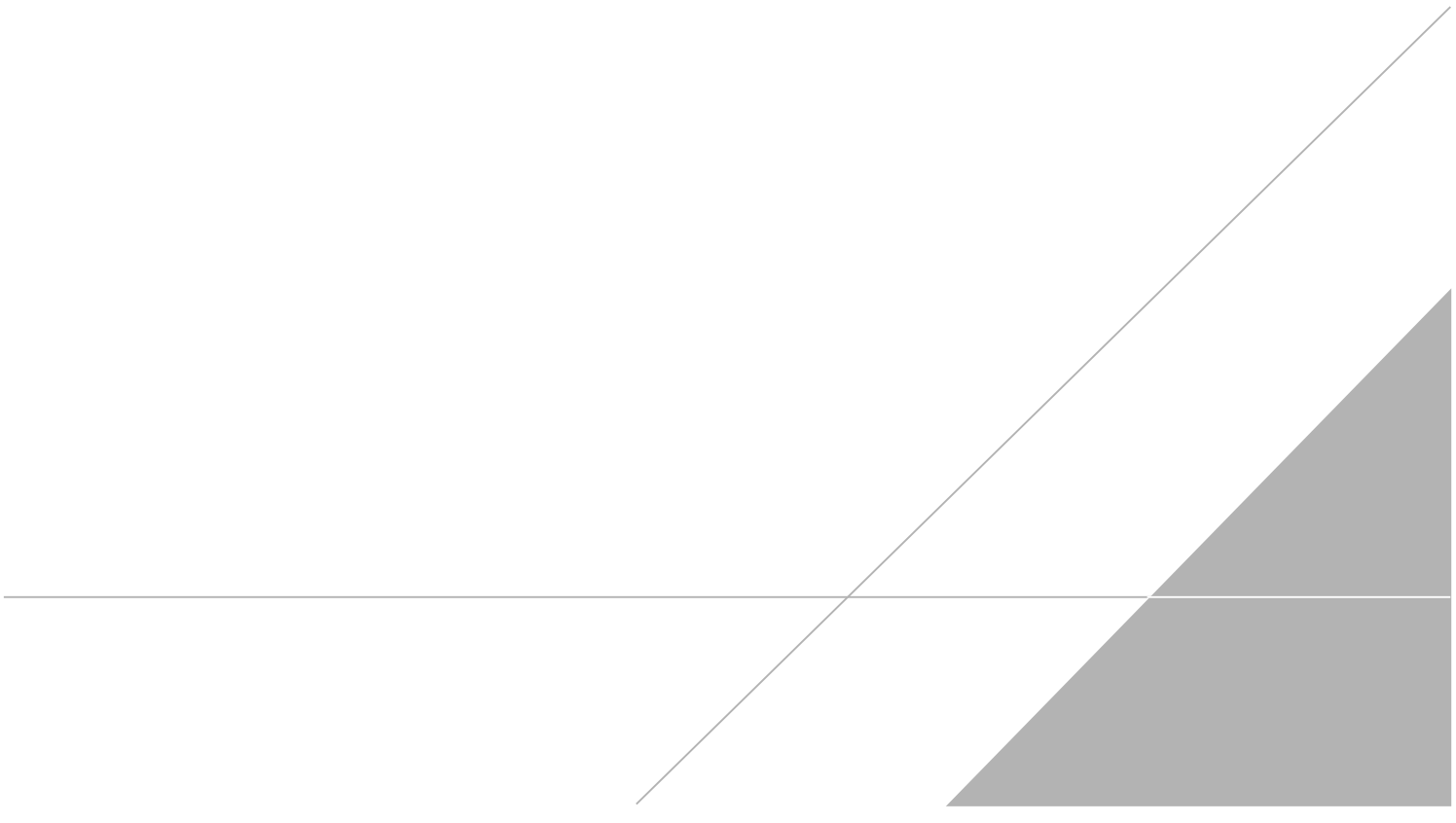
SIGNATURE: 

DATE: May 14, 2021

PEER REVIEW: Jennifer Singer

DATE: May 18, 2021

CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE



CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 Of [illegible]

SAMPLE ID

SAMPLE ID	DATE	TIME	Residual Chlorine
ER 01/12/2021	2/04	150	
YG-MC-235	2/14	310	pH 5.01

42521164

Date Signed: 5/7/2021

CHAIN-OF-CUSTODY / Analytical Request Document

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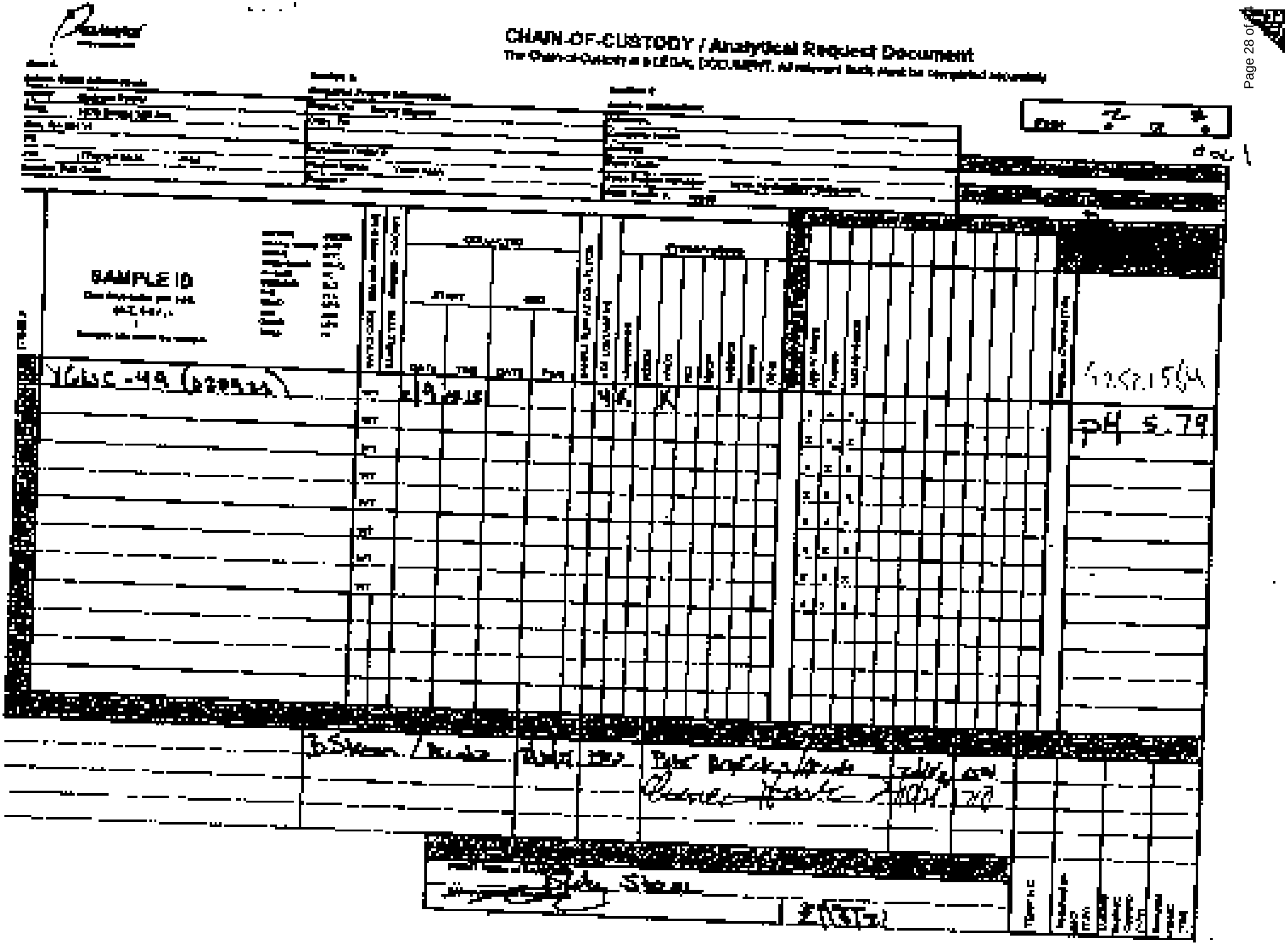

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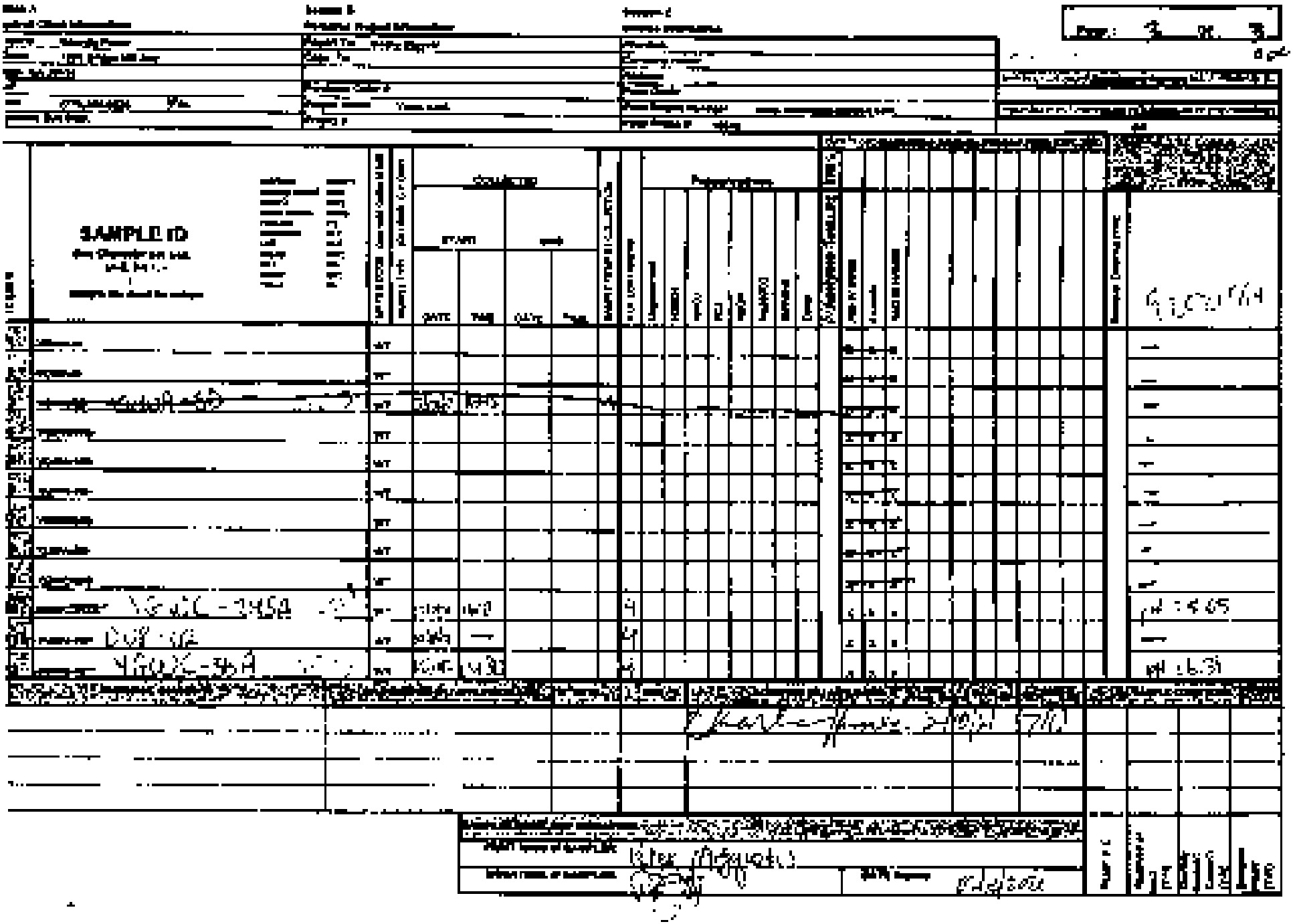

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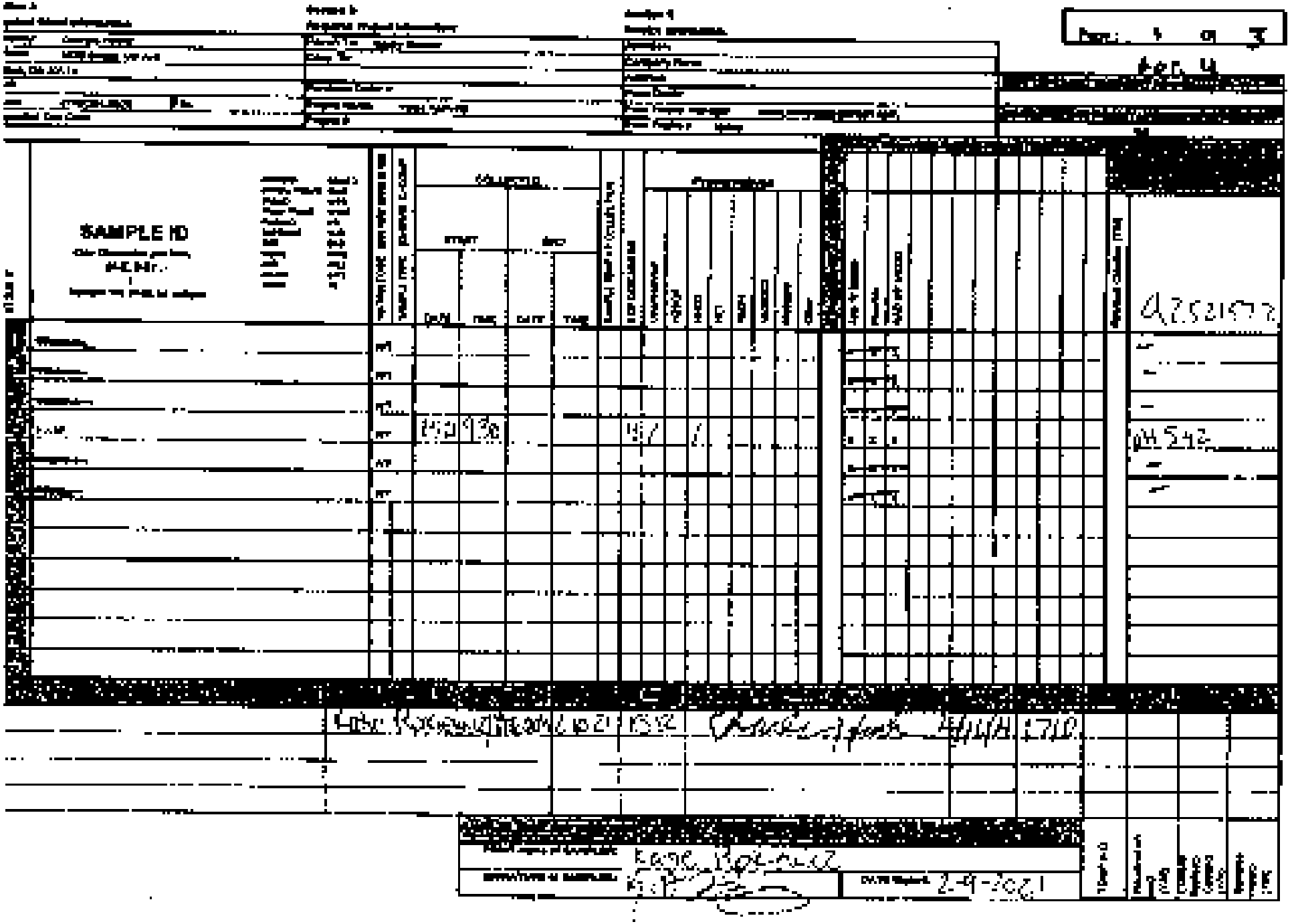

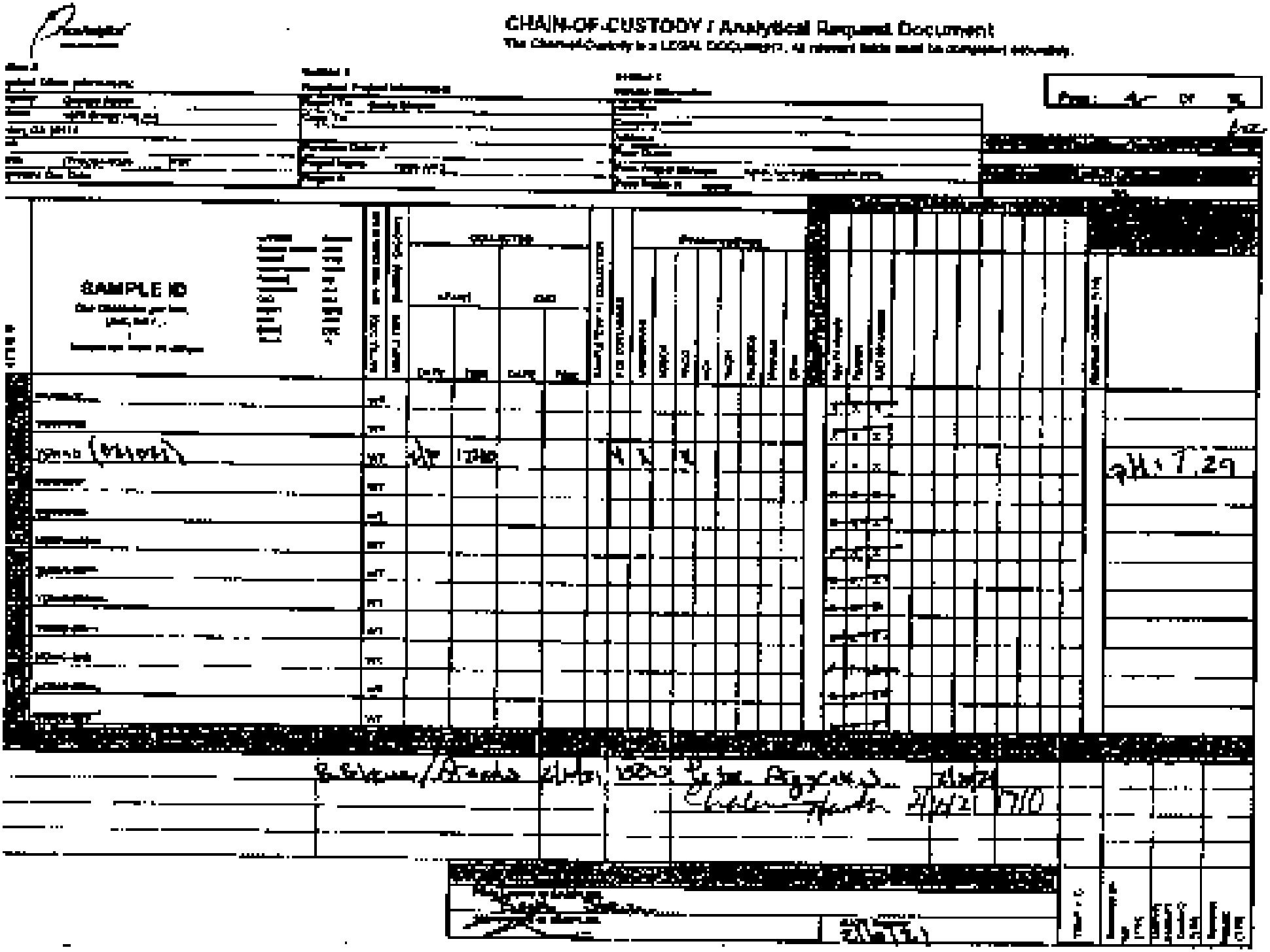

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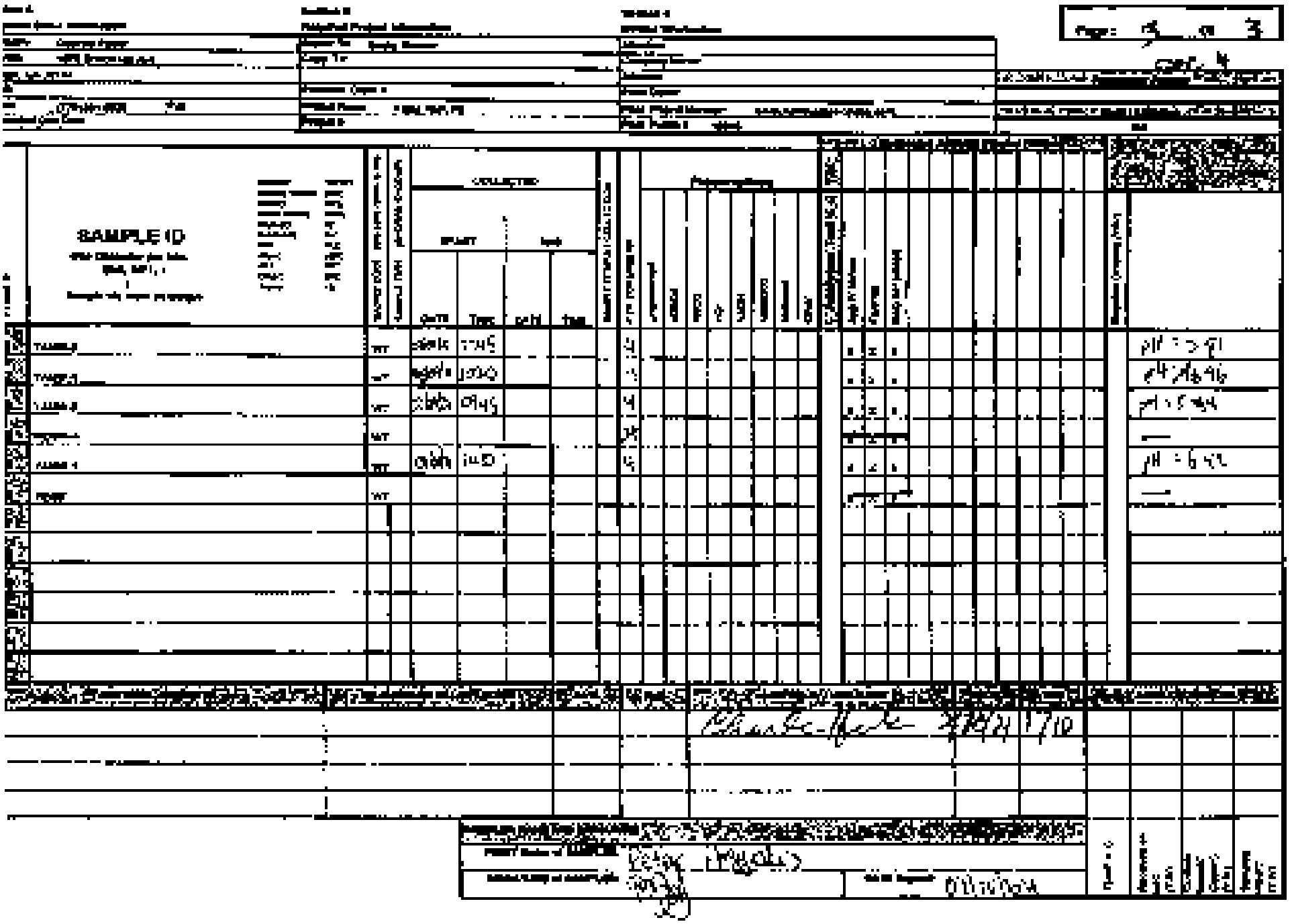
SAMPLE ID

CHAIN-OF-CUSTODY / Analytical Request Document

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



CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 1

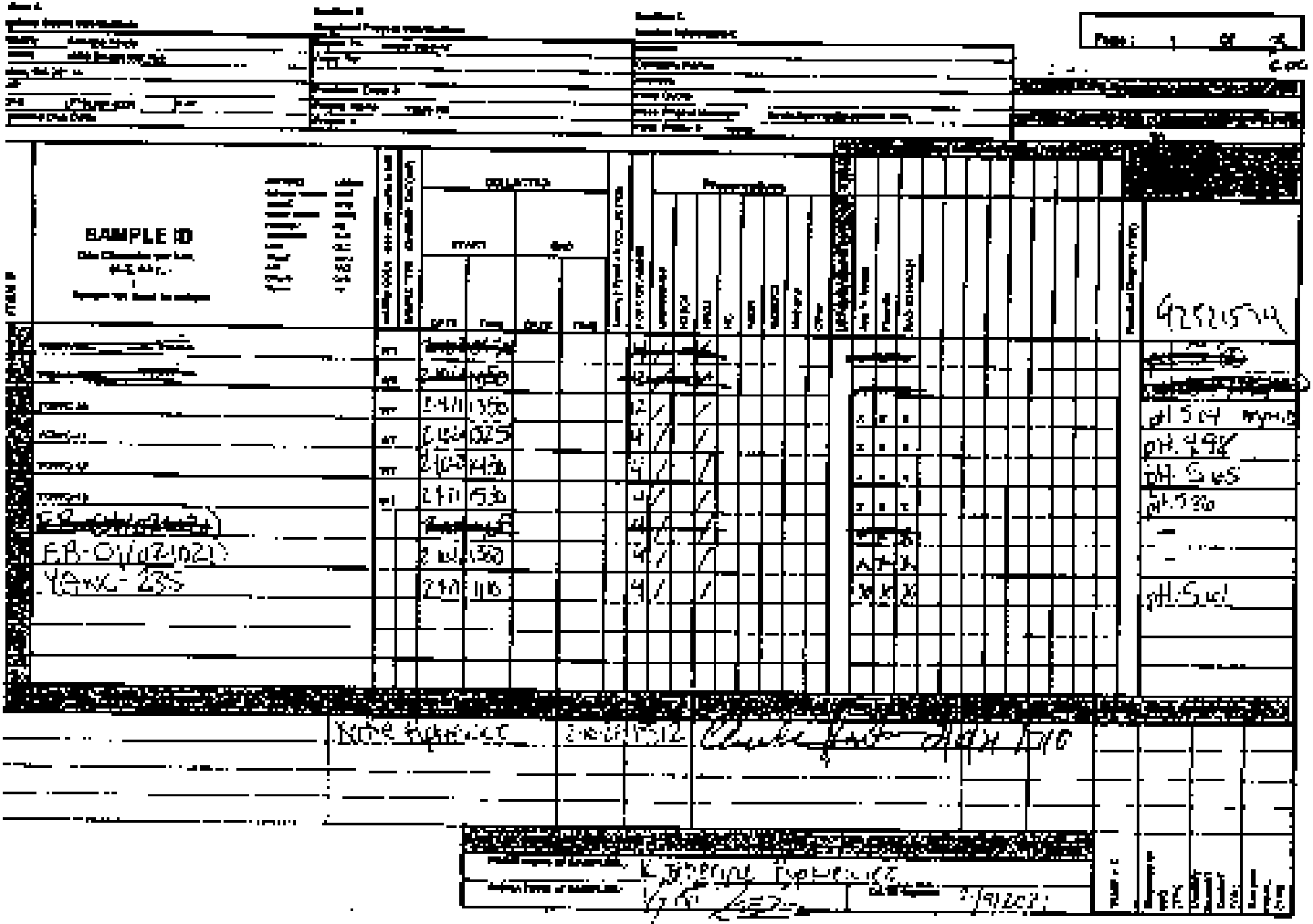
SAMPLE ID

SAMPLE ID	COLLECTED DATE	pH
12-33	2-11 1105	pH 5.53

Date Signed: 2-11-21

CHAIN-OF-CUSTODY / Analytical Request Document

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



CHAIN-OF-CUSTODY / Analytical Request Document

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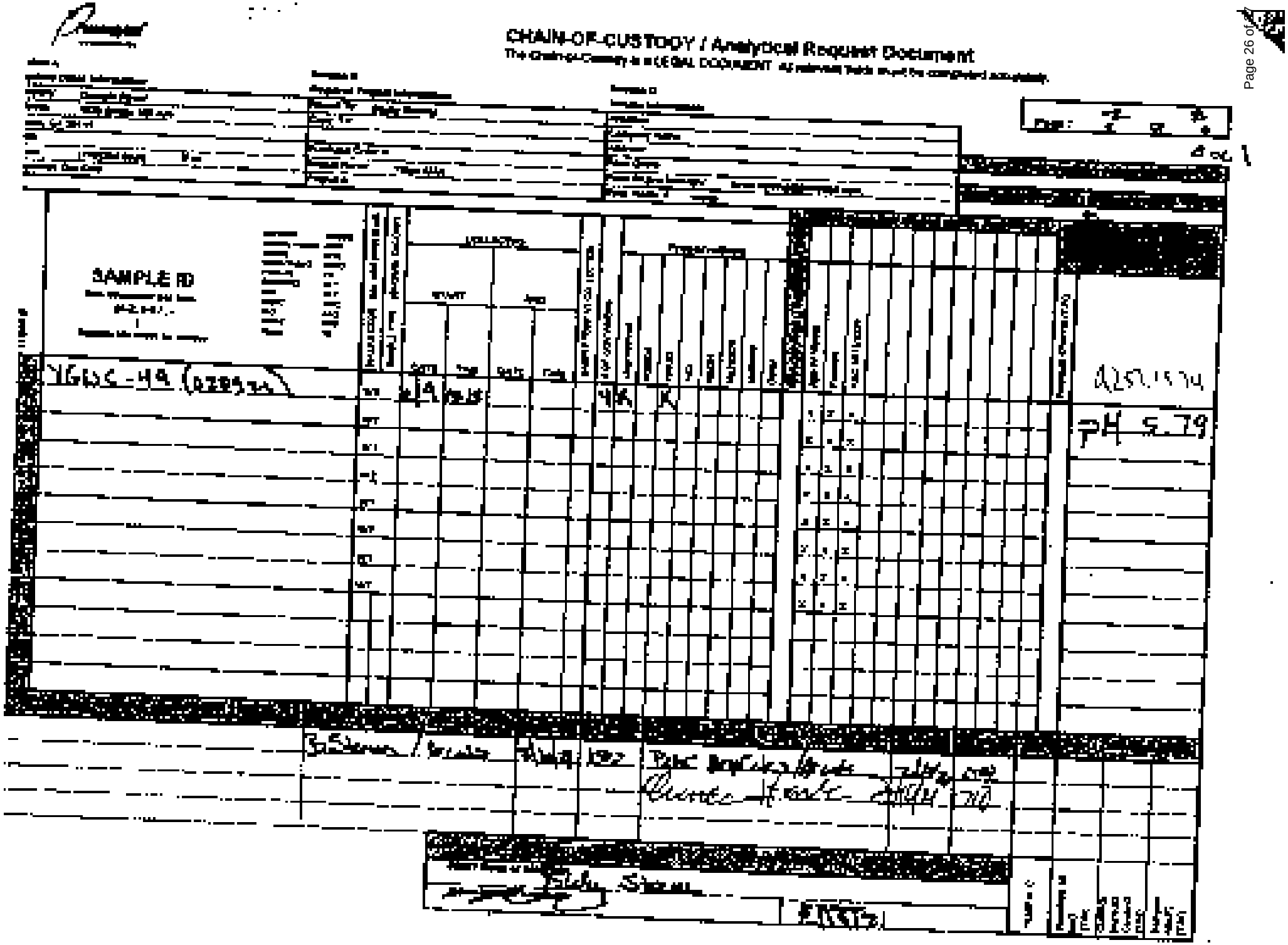
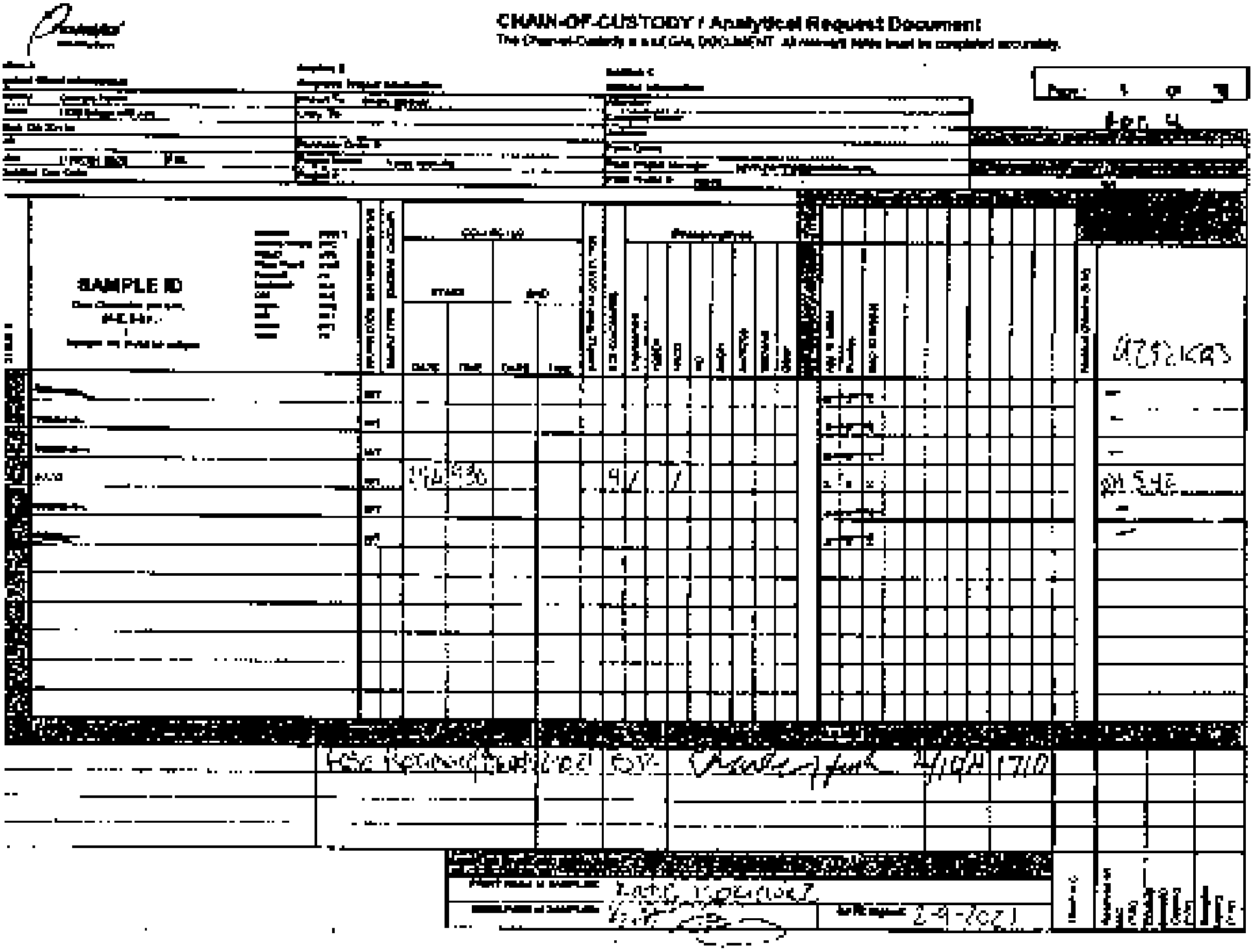


CHAIN-OF-CUSTODY / Analytical Request Document



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

SAMPLE ID

DATE

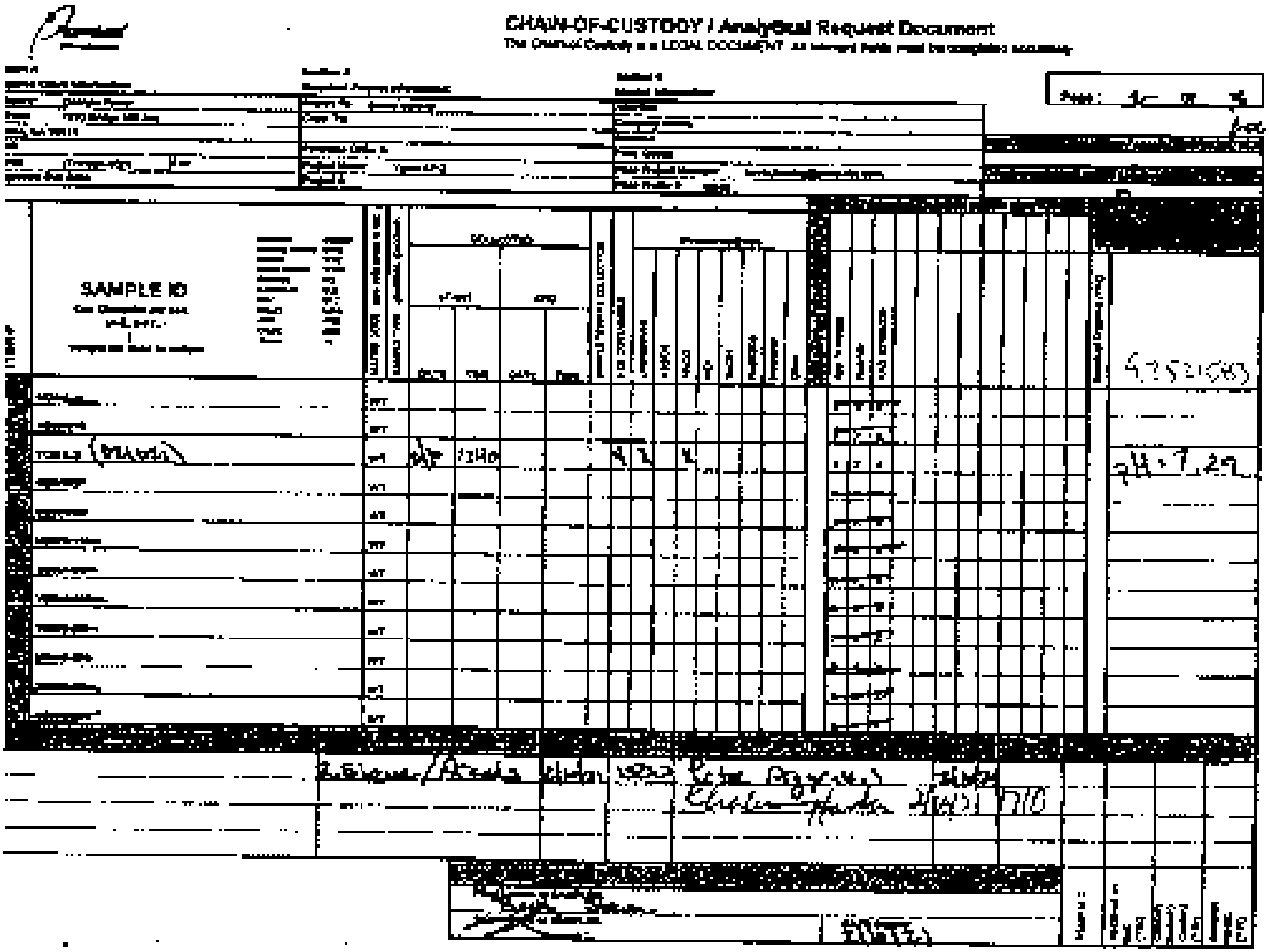
TIME

MATRIX

OF CONTAINERS

ANALYSIS REQUEST

2-9-2021


CHAIN-OF-CUSTODY / Analytical Request Document
SAMPLE ID

CHAIN-OF-CUSTODY / Analytical Request Document

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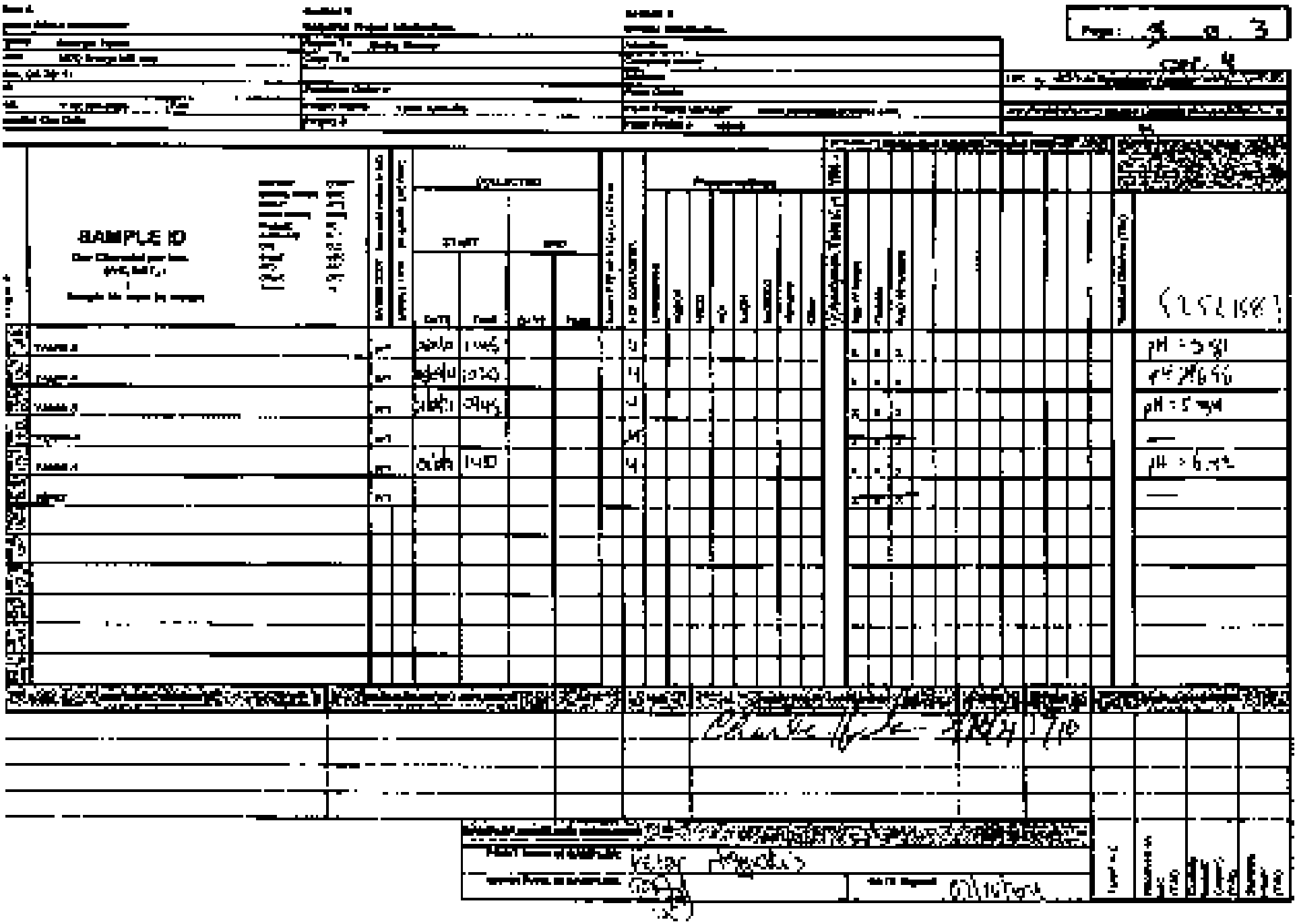

CHAIN-OF-CUSTODY / Analytical Request Document

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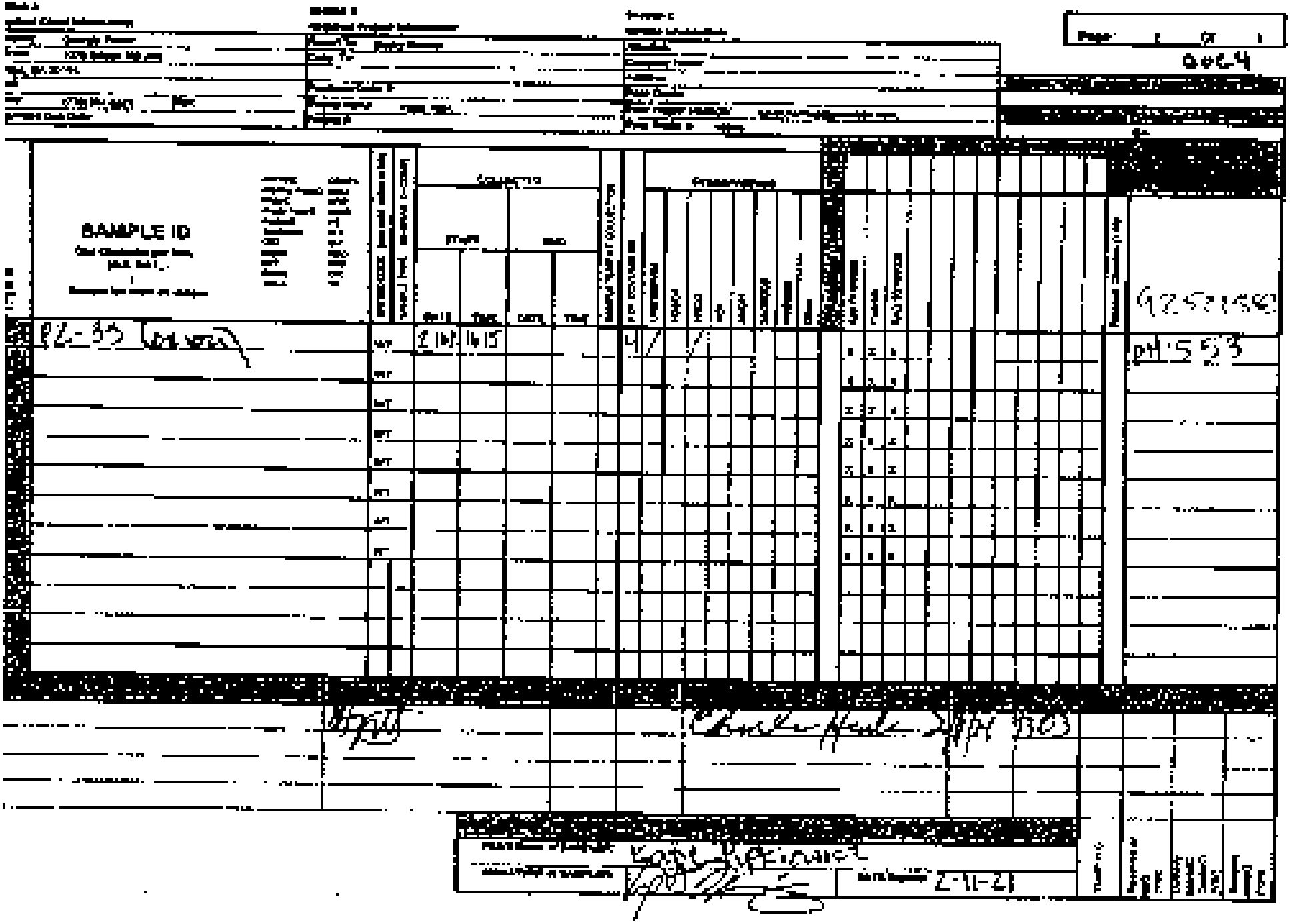

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92521574	YGWC-41	6020	Lead	0.005	mg/L	UB	EB Contamination
	YGWC-42	6020	Lead	0.005	mg/L	UB	EB Contamination
	YGWC-36A	6020	Lead	0.005	mg/L	UB	EB Contamination
92521564	No Qualifiers Added						
92521572	No Qualifiers Added						
92521583	No Qualifiers Added						

Abbreviations:
mg/L = milligrams per liter

Qualifiers:
UB = not detected due to blank contamination
J/UJ = Estimated

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

February 23, 2021

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

RE: Project: YATES R6/AMA
Pace Project No.: 92521574

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on February 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

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

CERTIFICATIONS

Project: YATES R6/AMA
Pace Project No.: 92521574

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: YATES R6/AMA
Pace Project No.: 92521574

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521574001	**YGWC-38 (020921)**	Water	02/09/21 13:50	02/10/21 17:10
92521574002	**YGWC-41 (021021)**	Water	02/10/21 13:25	02/10/21 17:10
92521574003	**YGWC-42 (021021)**	Water	02/10/21 14:30	02/10/21 17:10
92521574004	**YGWC-43 (020921)**	Water	02/09/21 15:30	02/10/21 17:10
92521574005	**EB-01(021021)**	Water	02/10/21 13:30	02/10/21 17:10
92521574006	**YGWC-23S (020921)**	Water	02/09/21 11:10	02/10/21 17:10
92521574007	**YGWC-49(020921)**	Water	02/09/21 15:15	02/10/21 17:10
92521574008	**YGWC-24SA (020921)**	Water	02/09/21 16:10	02/10/21 17:10
92521574009	**DUP-02 (020921)**	Water	02/09/21 00:00	02/10/21 17:10
92521574010	**YGWC-36A (021021)**	Water	02/10/21 14:30	02/10/21 17:10

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES R6/AMA
Pace Project No.: 92521574

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92521574001	**YGWC-38 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574002	**YGWC-41 (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574003	**YGWC-42 (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574004	**YGWC-43 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574005	**EB-01(021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574006	**YGWC-23S (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574007	**YGWC-49(020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574008	**YGWC-24SA (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574009	**DUP-02 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521574010	**YGWC-36A (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1

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

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES R6/AMA
Pace Project No.: 92521574

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521574001	**YGWC-38 (020921)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	5.04	Std. Units		02/23/21 08:10	
EPA 6020B	Antimony	0.00031J	mg/L	0.0030	02/18/21 19:41	
EPA 6020B	Arsenic	0.00098J	mg/L	0.0050	02/18/21 19:41	
EPA 6020B	Barium	0.016	mg/L	0.010	02/18/21 19:41	
EPA 6020B	Beryllium	0.0029J	mg/L	0.0030	02/18/21 19:41	
EPA 6020B	Cadmium	0.0014J	mg/L	0.0025	02/18/21 19:41	
EPA 6020B	Lithium	0.0067J	mg/L	0.030	02/18/21 19:41	
EPA 6020B	Selenium	0.073	mg/L	0.010	02/18/21 19:41	
92521574002	**YGWC-41 (021021)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	4.98	Std. Units		02/23/21 08:10	
EPA 6020B	Antimony	0.0014J	mg/L	0.0030	02/18/21 20:03	
EPA 6020B	Barium	0.017	mg/L	0.010	02/18/21 20:03	
EPA 6020B	Beryllium	0.0015J	mg/L	0.0030	02/18/21 20:03	
EPA 6020B	Lead	0.00020J	mg/L	0.0050	02/18/21 20:03	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	02/18/21 20:03	
EPA 6020B	Selenium	0.033	mg/L	0.010	02/18/21 20:03	
92521574003	**YGWC-42 (021021)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	5.65	Std. Units		02/23/21 08:10	
EPA 6020B	Antimony	0.00053J	mg/L	0.0030	02/18/21 20:09	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	02/18/21 20:09	
EPA 6020B	Barium	0.031	mg/L	0.010	02/18/21 20:09	
EPA 6020B	Beryllium	0.000057J	mg/L	0.0030	02/18/21 20:09	
EPA 6020B	Cobalt	0.0019J	mg/L	0.0050	02/18/21 20:09	
EPA 6020B	Lead	0.000054J	mg/L	0.0050	02/18/21 20:09	
EPA 6020B	Lithium	0.058	mg/L	0.030	02/18/21 20:09	
EPA 6020B	Molybdenum	0.00094J	mg/L	0.010	02/18/21 20:09	
EPA 6020B	Selenium	0.043	mg/L	0.010	02/18/21 20:09	
92521574004	**YGWC-43 (020921)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	5.86	Std. Units		02/23/21 08:10	
EPA 6020B	Barium	0.041	mg/L	0.010	02/18/21 20:15	
EPA 6020B	Beryllium	0.00053J	mg/L	0.0030	02/18/21 20:15	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	02/18/21 20:15	
EPA 6020B	Lithium	0.024J	mg/L	0.030	02/18/21 20:15	
EPA 6020B	Molybdenum	0.0012J	mg/L	0.010	02/18/21 20:15	
EPA 300.0 Rev 2.1 1993	Fluoride	0.058J	mg/L	0.10	02/12/21 19:04	
92521574005	**EB-01(021021)**					
EPA 6020B	Lead	0.00055J	mg/L	0.0050	02/18/21 20:21	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES R6/AMA
Pace Project No.: 92521574

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521574006	**YGWC-23S (020921)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	5.61	Std. Units		02/23/21 08:10	
EPA 6020B	Antimony	0.00052J	mg/L	0.0030	02/18/21 20:38	
EPA 6020B	Barium	0.042	mg/L	0.010	02/18/21 20:38	
EPA 6020B	Beryllium	0.00015J	mg/L	0.0030	02/18/21 20:38	
EPA 6020B	Chromium	0.00086J	mg/L	0.010	02/18/21 20:38	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	02/18/21 20:38	
EPA 6020B	Selenium	0.032	mg/L	0.010	02/18/21 20:38	
EPA 7470A	Mercury	0.00015J	mg/L	0.00050	02/16/21 11:06	
92521574007	**YGWC-49(020921)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	5.79	Std. Units		02/23/21 08:10	
EPA 6020B	Barium	0.071	mg/L	0.010	02/18/21 20:44	
EPA 6020B	Beryllium	0.00013J	mg/L	0.0030	02/18/21 20:44	
EPA 6020B	Chromium	0.0020J	mg/L	0.010	02/18/21 20:44	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	02/18/21 20:44	
EPA 6020B	Selenium	0.0079J	mg/L	0.010	02/18/21 20:44	
EPA 7470A	Mercury	0.00014J	mg/L	0.00050	02/16/21 11:09	
92521574008	**YGWC-24SA (020921)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	5.69	Std. Units		02/23/21 08:10	
EPA 6020B	Barium	0.031	mg/L	0.010	02/18/21 20:49	
EPA 6020B	Beryllium	0.00013J	mg/L	0.0030	02/18/21 20:49	
EPA 6020B	Chromium	0.0011J	mg/L	0.010	02/18/21 20:49	
EPA 6020B	Lead	0.00036J	mg/L	0.0050	02/18/21 20:49	
92521574009	**DUP-02 (020921)**					
EPA 6020B	Barium	0.030	mg/L	0.010	02/18/21 20:55	
EPA 6020B	Beryllium	0.00014J	mg/L	0.0030	02/18/21 20:55	
EPA 6020B	Chromium	0.0013J	mg/L	0.010	02/18/21 20:55	
EPA 6020B	Lead	0.00036J	mg/L	0.0050	02/18/21 20:55	
92521574010	**YGWC-36A (021021)**					
	Performed by	CUSTOMER			02/23/21 08:10	
	pH	6.31	Std. Units		02/23/21 08:10	
EPA 6020B	Antimony	0.028	mg/L	0.0030	02/18/21 21:01	
EPA 6020B	Arsenic	0.00088J	mg/L	0.0050	02/18/21 21:01	
EPA 6020B	Barium	0.035	mg/L	0.010	02/18/21 21:01	
EPA 6020B	Beryllium	0.000099J	mg/L	0.0030	02/18/21 21:01	
EPA 6020B	Chromium	0.00094J	mg/L	0.010	02/18/21 21:01	
EPA 6020B	Cobalt	0.00038J	mg/L	0.0050	02/18/21 21:01	
EPA 6020B	Lead	0.00051J	mg/L	0.0050	02/18/21 21:01	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	02/18/21 21:01	

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-38 (020921) **Lab ID: 92521574001** Collected: 02/09/21 13:50 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**5.04**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00031J**	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 19:41	7440-36-0	
Arsenic	**0.00098J**	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 19:41	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 19:41	7440-39-3	
Beryllium	**0.0029J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 19:41	7440-41-7	
Cadmium	**0.0014J**	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 19:41	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 19:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 19:41	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 19:41	7439-92-1	
Lithium	**0.0067J**	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 19:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 19:41	7439-98-7	
Selenium	**0.073**	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 19:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 19:41	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 10:43	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 17:08	16984-48-8	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-41 (021021) **Lab ID: 92521574002** Collected: 02/10/21 13:25 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**4.98**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0014J**	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:03	7440-38-2	
Barium	**0.017**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:03	7440-39-3	
Beryllium	**0.0015J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:03	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:03	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:03	7440-48-4	
Lead	**0.00020J**	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:03	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:03	7439-98-7	
Selenium	**0.033**	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:03	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:03	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 10:57	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 17:51	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-42 (021021) **Lab ID: 92521574003** Collected: 02/10/21 14:30 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**5.65**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00053J**	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:09	7440-36-0	
Arsenic	**0.0016J**	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:09	7440-38-2	
Barium	**0.031**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:09	7440-39-3	
Beryllium	**0.000057J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:09	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:09	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:09	7440-47-3	
Cobalt	**0.0019J**	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:09	7440-48-4	
Lead	**0.000054J**	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:09	7439-92-1	
Lithium	**0.058**	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:09	7439-93-2	
Molybdenum	**0.00094J**	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:09	7439-98-7	
Selenium	**0.043**	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:09	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:09	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 10:59	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 18:49	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-43 (020921) **Lab ID: 92521574004** Collected: 02/09/21 15:30 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**5.86**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:15	7440-38-2	
Barium	**0.041**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:15	7440-39-3	
Beryllium	**0.00053J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:15	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:15	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:15	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:15	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:15	7439-92-1	
Lithium	**0.024J**	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:15	7439-93-2	
Molybdenum	**0.0012J**	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:15	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:15	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:15	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:02	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.058J**	mg/L	0.10	0.050	1		02/12/21 19:04	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: EB-01(021021) **Lab ID: 92521574005** Collected: 02/10/21 13:30 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:21	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:21	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:21	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:21	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:21	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:21	7440-48-4	
Lead	**0.00055J**	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:21	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:21	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:21	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:21	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:04	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 19:18	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-23S (020921) **Lab ID: 92521574006** Collected: 02/09/21 11:10 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**5.61**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00052J**	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:38	7440-38-2	
Barium	**0.042**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:38	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:38	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:38	7440-43-9	
Chromium	**0.00086J**	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:38	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:38	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:38	7439-98-7	
Selenium	**0.032**	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:38	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00015J**	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:06	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 19:33	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-49(020921) **Lab ID: 92521574007** Collected: 02/09/21 15:15 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**5.79**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:44	7440-38-2	
Barium	**0.071**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:44	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:44	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:44	7440-43-9	
Chromium	**0.0020J**	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:44	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:44	7439-92-1	
Lithium	**0.0038J**	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:44	7439-98-7	
Selenium	**0.0079J**	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:44	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00014J**	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:09	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 19:47	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-24SA (020921) **Lab ID: 92521574008** Collected: 02/09/21 16:10 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**5.69**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:49	7440-38-2	
Barium	**0.031**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:49	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:49	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:49	7440-43-9	
Chromium	**0.0011J**	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:49	7440-48-4	
Lead	**0.00036J**	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:49	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:49	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:49	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:11	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:01	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: DUP-02 (020921) **Lab ID: 92521574009** Collected: 02/09/21 00:00 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 20:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 20:55	7440-38-2	
Barium	**0.030**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 20:55	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 20:55	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 20:55	7440-43-9	
Chromium	**0.0013J**	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 20:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 20:55	7440-48-4	
Lead	**0.00036J**	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 20:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 20:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 20:55	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 20:55	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 20:55	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:18	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:45	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES R6/AMA
Pace Project No.: 92521574

Sample: YGWC-36A (021021) **Lab ID: 92521574010** Collected: 02/10/21 14:30 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:10		
pH	**6.31**	Std. Units			1		02/23/21 08:10		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.028**	mg/L	0.0030	0.00028	1	02/17/21 09:52	02/18/21 21:01	7440-36-0	
Arsenic	**0.00088J**	mg/L	0.0050	0.00078	1	02/17/21 09:52	02/18/21 21:01	7440-38-2	
Barium	**0.035**	mg/L	0.010	0.00071	1	02/17/21 09:52	02/18/21 21:01	7440-39-3	
Beryllium	**0.000099J**	mg/L	0.0030	0.000046	1	02/17/21 09:52	02/18/21 21:01	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 09:52	02/18/21 21:01	7440-43-9	
Chromium	**0.00094J**	mg/L	0.010	0.00055	1	02/17/21 09:52	02/18/21 21:01	7440-47-3	
Cobalt	**0.00038J**	mg/L	0.0050	0.00038	1	02/17/21 09:52	02/18/21 21:01	7440-48-4	
Lead	**0.00051J**	mg/L	0.0050	0.000036	1	02/17/21 09:52	02/18/21 21:01	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00081	1	02/17/21 09:52	02/18/21 21:01	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 09:52	02/18/21 21:01	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 09:52	02/18/21 21:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 09:52	02/18/21 21:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:21	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 21:57	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES R6/AMA
Pace Project No.: 92521574

QC Batch: 600602
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521574001, 92521574002, 92521574003, 92521574004, 92521574005, 92521574006, 92521574007, 92521574008, 92521574009, 92521574010

METHOD BLANK: 3165498 Matrix: Water
Associated Lab Samples: 92521574001, 92521574002, 92521574003, 92521574004, 92521574005, 92521574006, 92521574007, 92521574008, 92521574009, 92521574010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	02/18/21 19:29	
Arsenic	mg/L	ND	0.0050	0.00078	02/18/21 19:29	
Barium	mg/L	ND	0.010	0.00071	02/18/21 19:29	
Beryllium	mg/L	ND	0.0030	0.000046	02/18/21 19:29	
Cadmium	mg/L	ND	0.0025	0.00012	02/18/21 19:29	
Chromium	mg/L	ND	0.010	0.00055	02/18/21 19:29	
Cobalt	mg/L	ND	0.0050	0.00038	02/18/21 19:29	
Lead	mg/L	ND	0.0050	0.000036	02/18/21 19:29	
Lithium	mg/L	ND	0.030	0.00081	02/18/21 19:29	
Molybdenum	mg/L	ND	0.010	0.00069	02/18/21 19:29	
Selenium	mg/L	ND	0.010	0.0016	02/18/21 19:29	
Thallium	mg/L	ND	0.0010	0.00014	02/18/21 19:29	

LABORATORY CONTROL SAMPLE: 3165499

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	101	80-120	
Arsenic	mg/L	0.1	0.093	93	80-120	
Barium	mg/L	0.1	0.094	94	80-120	
Beryllium	mg/L	0.1	0.092	92	80-120	
Cadmium	mg/L	0.1	0.091	91	80-120	
Chromium	mg/L	0.1	0.093	93	80-120	
Cobalt	mg/L	0.1	0.093	93	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.093	93	80-120	
Molybdenum	mg/L	0.1	0.093	93	80-120	
Selenium	mg/L	0.1	0.090	90	80-120	
Thallium	mg/L	0.1	0.091	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3165500 3165501

Parameter	Units	92521574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00031J	0.1	0.1	0.11	0.10	109	102	75-125	6	20	
Arsenic	mg/L	0.00098J	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Barium	mg/L	0.016	0.1	0.1	0.11	0.11	99	94	75-125	4	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES R6/AMA
Pace Project No.: 92521574

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3165500 3165501

Parameter	Units	92521574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	0.0029J	0.1	0.1	0.092	0.089	89	86	75-125	3	20	
Cadmium	mg/L	0.0014J	0.1	0.1	0.096	0.096	95	95	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.098	98	98	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.097	95	97	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.093	0.091	93	91	75-125	2	20	
Lithium	mg/L	0.0067J	0.1	0.1	0.098	0.094	91	87	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	3	20	
Selenium	mg/L	0.073	0.1	0.1	0.17	0.17	94	94	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES R6/AMA
Pace Project No.: 92521574

QC Batch: 600020 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521574001, 92521574002, 92521574003, 92521574004, 92521574005, 92521574006, 92521574007, 92521574008, 92521574009, 92521574010

METHOD BLANK: 3163226 Matrix: Water
Associated Lab Samples: 92521574001, 92521574002, 92521574003, 92521574004, 92521574005, 92521574006, 92521574007, 92521574008, 92521574009, 92521574010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/16/21 10:21	

LABORATORY CONTROL SAMPLE: 3163227

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3163228 3163229

Parameter	Units	92521574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0025	96	101	75-125	5	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES R6/AMA
Pace Project No.: 92521574

QC Batch: 599653 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92521574001, 92521574002, 92521574003, 92521574004, 92521574005, 92521574006, 92521574007, 92521574008

METHOD BLANK: 3161218 Matrix: Water
Associated Lab Samples: 92521574001, 92521574002, 92521574003, 92521574004, 92521574005, 92521574006, 92521574007, 92521574008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/12/21 12:49	

LABORATORY CONTROL SAMPLE: 3161219

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.7	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161220 3161221

Parameter	Units	92521478001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.8	2.7	109	104	90-110	5	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161241 3161242

Parameter	Units	92521574001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	3.7	3.6	146	142	90-110	3	10	M1

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES R6/AMA
Pace Project No.: 92521574

QC Batch: 599663
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: 92521574009, 92521574010

METHOD BLANK: 3161251 Matrix: Water
Associated Lab Samples: 92521574009, 92521574010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/12/21 20:16	

LABORATORY CONTROL SAMPLE: 3161252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161253 3161254

Parameter	Units	92521574009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	109	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161255 3161256

Parameter	Units	92521581005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.5	2.7	100	108	90-110	8	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES R6/AMA
Pace Project No.: 92521574

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES R6/AMA
Pace Project No.: 92521574

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521574001	**YGWC-38 (020921)**				
92521574002	**YGWC-41 (021021)**				
92521574003	**YGWC-42 (021021)**				
92521574004	**YGWC-43 (020921)**				
92521574006	**YGWC-23S (020921)**				
92521574007	**YGWC-49(020921)**				
92521574008	**YGWC-24SA (020921)**				
92521574010	**YGWC-36A (021021)**				
92521574001	**YGWC-38 (020921)**	EPA 3005A	600602	EPA 6020B	600714
92521574002	**YGWC-41 (021021)**	EPA 3005A	600602	EPA 6020B	600714
92521574003	**YGWC-42 (021021)**	EPA 3005A	600602	EPA 6020B	600714
92521574004	**YGWC-43 (020921)**	EPA 3005A	600602	EPA 6020B	600714
92521574005	**EB-01(021021)**	EPA 3005A	600602	EPA 6020B	600714
92521574006	**YGWC-23S (020921)**	EPA 3005A	600602	EPA 6020B	600714
92521574007	**YGWC-49(020921)**	EPA 3005A	600602	EPA 6020B	600714
92521574008	**YGWC-24SA (020921)**	EPA 3005A	600602	EPA 6020B	600714
92521574009	**DUP-02 (020921)**	EPA 3005A	600602	EPA 6020B	600714
92521574010	**YGWC-36A (021021)**	EPA 3005A	600602	EPA 6020B	600714
92521574001	**YGWC-38 (020921)**	EPA 7470A	600020	EPA 7470A	600225
92521574002	**YGWC-41 (021021)**	EPA 7470A	600020	EPA 7470A	600225
92521574003	**YGWC-42 (021021)**	EPA 7470A	600020	EPA 7470A	600225
92521574004	**YGWC-43 (020921)**	EPA 7470A	600020	EPA 7470A	600225
92521574005	**EB-01(021021)**	EPA 7470A	600020	EPA 7470A	600225
92521574006	**YGWC-23S (020921)**	EPA 7470A	600020	EPA 7470A	600225
92521574007	**YGWC-49(020921)**	EPA 7470A	600020	EPA 7470A	600225
92521574008	**YGWC-24SA (020921)**	EPA 7470A	600020	EPA 7470A	600225
92521574009	**DUP-02 (020921)**	EPA 7470A	600020	EPA 7470A	600225
92521574010	**YGWC-36A (021021)**	EPA 7470A	600020	EPA 7470A	600225
92521574001	**YGWC-38 (020921)**	EPA 300.0 Rev 2.1 1993	599653		
92521574002	**YGWC-41 (021021)**	EPA 300.0 Rev 2.1 1993	599653		
92521574003	**YGWC-42 (021021)**	EPA 300.0 Rev 2.1 1993	599653		
92521574004	**YGWC-43 (020921)**	EPA 300.0 Rev 2.1 1993	599653		
92521574005	**EB-01(021021)**	EPA 300.0 Rev 2.1 1993	599653		
92521574006	**YGWC-23S (020921)**	EPA 300.0 Rev 2.1 1993	599653		
92521574007	**YGWC-49(020921)**	EPA 300.0 Rev 2.1 1993	599653		
92521574008	**YGWC-24SA (020921)**	EPA 300.0 Rev 2.1 1993	599653		
92521574009	**DUP-02 (020921)**	EPA 300.0 Rev 2.1 1993	599663		
92521574010	**YGWC-36A (021021)**	EPA 300.0 Rev 2.1 1993	599663		

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

Laboratory receiving samples:

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

[illegible]

Client Name: GA Power

Project #: **WO#: 92521574**

92521574

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

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

Date/Initials Person Examining Contents: 2/10/21

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

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

Thermometer:
☐ IR Gun ID: 270

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp.: 2.1 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): 2.1

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

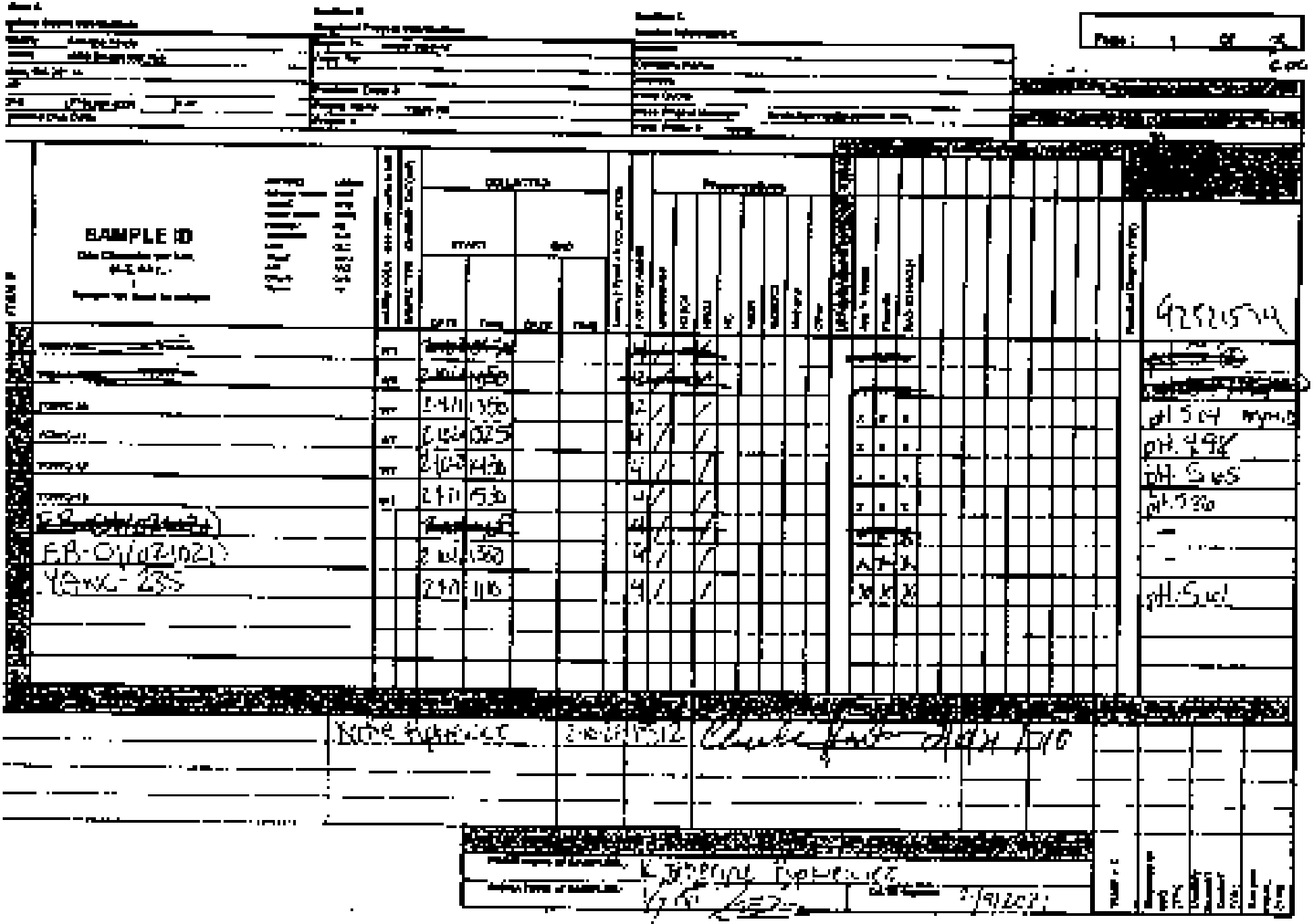
Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

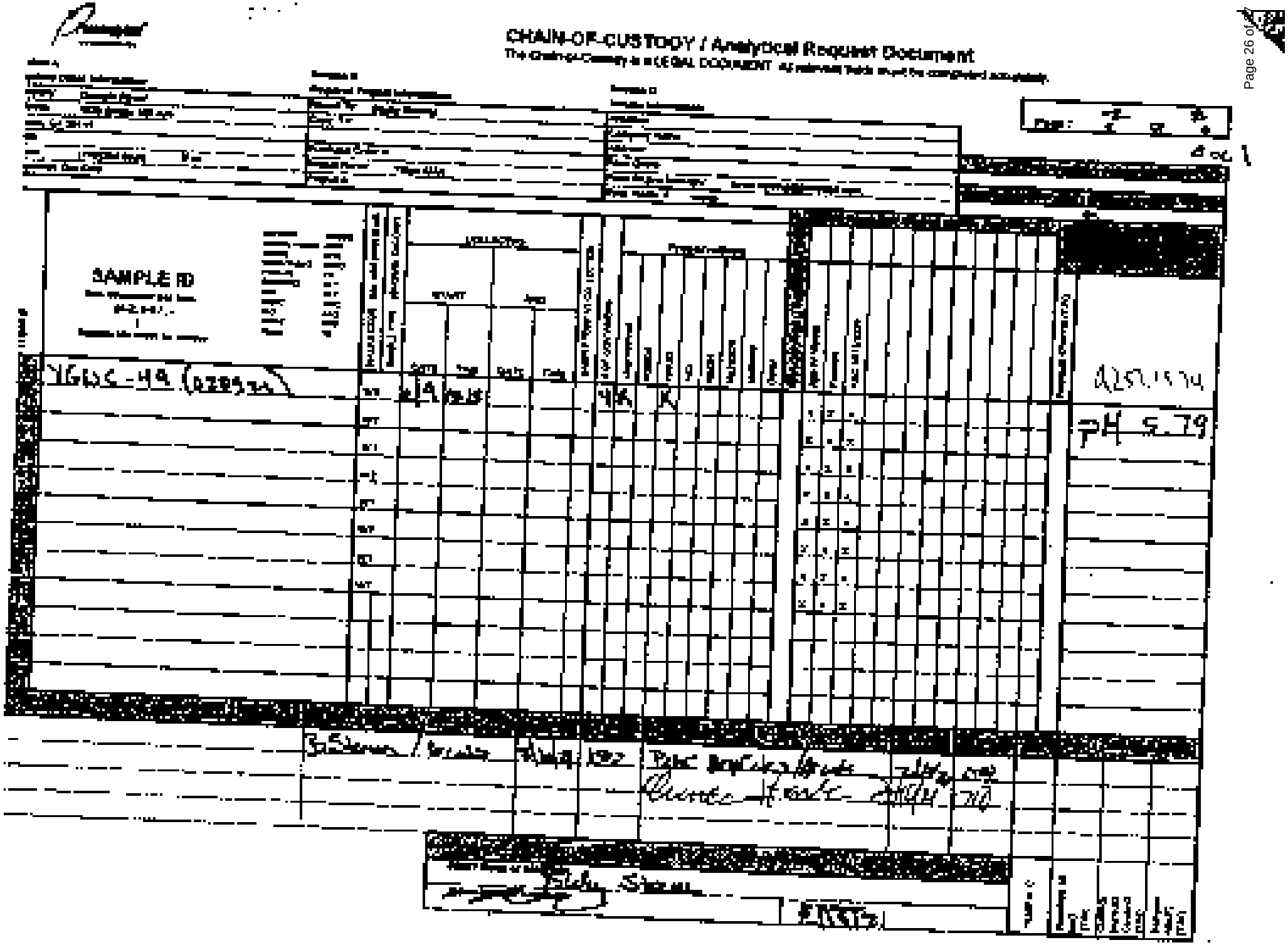
CHAIN-OF-CUSTODY / Analytical Request Document

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



CHAIN-OF-CUSTODY / Analytical Request Document

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



CHAIN-OF-CUSTODY / Analytical Request Document

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

February 25, 2021

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

RE: Project: YATES AMA
Pace Project No.: 92521581

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 12, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: YATES AMA
Pace Project No.: 92521581

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

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

SAMPLE SUMMARY

Project: YATES AMA
Pace Project No.: 92521581

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521581001	**YGWA-5D (020821)**	Water	02/08/21 16:45	02/10/21 17:10
92521581002	**DUP-01(020821)**	Water	02/08/21 00:00	02/10/21 17:10
92521581003	**YGWA-5I (020821)**	Water	02/08/21 16:20	02/10/21 17:10
92521581004	**YGWA-39 (021021)**	Water	02/10/21 09:30	02/10/21 17:10
92521581005	**YGWA-40 (021021)**	Water	02/10/21 10:50	02/10/21 17:10
92521581006	**FB-01(021021)**	Water	02/10/21 11:05	02/10/21 17:10
92521581007	**YGWA-20S (020921)**	Water	02/09/21 16:50	02/10/21 17:10
92521581008	**YGWA-4I(020921)**	Water	02/09/21 09:50	02/10/21 17:10
92521581009	**YGWA-17S(020921)**	Water	02/09/21 11:15	02/10/21 17:10
92521581010	**YGWA-18S(020921)**	Water	02/09/21 13:25	02/10/21 17:10
92521581011	**YGWA-18I(020921)**	Water	02/09/21 14:00	02/10/21 17:10
92521581012	**YGWA-21I(020921)**	Water	02/09/21 16:10	02/10/21 17:10
92521581013	**YGWA-3I(021021)**	Water	02/10/21 16:40	02/11/21 13:03
92521581014	**YGWA-3D(021021)**	Water	02/10/21 17:25	02/11/21 13:03
92521581015	**YGWA-30I(021121)**	Water	02/11/21 09:50	02/11/21 13:03
92521581016	**FB-01(021121)**	Water	02/11/21 10:00	02/11/21 13:03
92521581017	**EB-01(021121)**	Water	02/11/21 12:05	02/11/21 13:03
92521578002	**YGWA-14S (021021)**	Water	02/10/21 08:50	02/10/21 17:10
92521578010	**YGWA-1I (021221)**	Water	02/12/21 13:20	02/12/21 17:10
92521578011	**YGWA-1D (021221)**	Water	02/12/21 11:55	02/12/21 17:10
92521578001	**EB-02 (021021)**	Water	02/10/21 11:30	02/10/21 17:10
92521578003	**DUP-1 (021021)**	Water	02/10/21 00:00	02/10/21 17:10

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: YATES AMA
Pace Project No.: 92521581

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92521581001	**YGWA-5D (020821)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581002	**DUP-01(020821)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581003	**YGWA-5I (020821)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581004	**YGWA-39 (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581005	**YGWA-40 (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581006	**FB-01(021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581007	**YGWA-20S (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581008	**YGWA-4I(020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581009	**YGWA-17S(020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581010	**YGWA-18S(020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581011	**YGWA-18I(020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581012	**YGWA-21I(020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581013	**YGWA-3I(021021)**	EPA 6020B	CW1	12

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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SAMPLE ANALYTE COUNT

Project: YATES AMA
Pace Project No.: 92521581

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581014	**YGWA-3D(021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581015	**YGWA-30I(021121)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581016	**FB-01(021121)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521581017	**EB-01(021121)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521578002	**YGWA-14S (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521578010	**YGWA-1I (021221)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521578011	**YGWA-1D (021221)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	JLH	1
92521578001	**EB-02 (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521578003	**DUP-1 (021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1

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

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

SUMMARY OF DETECTION

Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521581001	**YGWA-5D (020821)**					
EPA 6020B	Barium	0.0079J	mg/L	0.010	02/17/21 19:42	
EPA 6020B	Lead	0.00013J	mg/L	0.0050	02/17/21 19:42	
EPA 6020B	Lithium	0.0063J	mg/L	0.030	02/17/21 19:42	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	02/17/21 19:42	
EPA 300.0 Rev 2.1 1993	Fluoride	0.055J	mg/L	0.10	02/13/21 00:35	
92521581002	**DUP-01(020821)**					
EPA 6020B	Barium	0.020	mg/L	0.010	02/17/21 19:47	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/17/21 19:47	
92521581003	**YGWA-5I (020821)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.67	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.020	mg/L	0.010	02/17/21 19:53	
EPA 6020B	Lead	0.000037J	mg/L	0.0050	02/17/21 19:53	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	02/17/21 19:53	
92521581004	**YGWA-39 (021021)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.80	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.027	mg/L	0.010	02/17/21 19:59	
EPA 6020B	Beryllium	0.000051J	mg/L	0.0030	02/17/21 19:59	
EPA 6020B	Cadmium	0.00019J	mg/L	0.0025	02/17/21 19:59	
EPA 6020B	Cobalt	0.00098J	mg/L	0.0050	02/17/21 19:59	
EPA 6020B	Lithium	0.0071J	mg/L	0.030	02/17/21 19:59	
EPA 6020B	Molybdenum	0.0013J	mg/L	0.010	02/17/21 19:59	
92521581005	**YGWA-40 (021021)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.19	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.032	mg/L	0.010	02/17/21 20:05	
EPA 6020B	Beryllium	0.00021J	mg/L	0.0030	02/17/21 20:05	
92521581006	**FB-01(021021)**					
EPA 6020B	Antimony	0.00052J	mg/L	0.0030	02/17/21 20:39	B
92521581007	**YGWA-20S (020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.86	Std. Units		02/23/21 08:11	
EPA 6020B	Antimony	0.00032J	mg/L	0.0030	02/17/21 20:45	B
EPA 6020B	Barium	0.015	mg/L	0.010	02/17/21 20:45	
EPA 6020B	Beryllium	0.000068J	mg/L	0.0030	02/17/21 20:45	
EPA 6020B	Chromium	0.00056J	mg/L	0.010	02/17/21 20:45	
EPA 6020B	Lead	0.000063J	mg/L	0.0050	02/17/21 20:45	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521581008	**YGWA-4I(020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	6.06	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.013	mg/L	0.010	02/17/21 20:50	
EPA 6020B	Lithium	0.011J	mg/L	0.030	02/17/21 20:50	
92521581009	**YGWA-17S(020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.62	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.016	mg/L	0.010	02/17/21 20:56	
EPA 6020B	Beryllium	0.000094J	mg/L	0.0030	02/17/21 20:56	
EPA 6020B	Chromium	0.00098J	mg/L	0.010	02/17/21 20:56	
92521581010	**YGWA-18S(020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.43	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.017	mg/L	0.010	02/17/21 21:02	
EPA 6020B	Beryllium	0.000098J	mg/L	0.0030	02/17/21 21:02	
EPA 6020B	Chromium	0.0013J	mg/L	0.010	02/17/21 21:02	
EPA 6020B	Lead	0.000094J	mg/L	0.0050	02/17/21 21:02	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	02/17/21 21:02	
92521581011	**YGWA-18I(020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	6.12	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.023	mg/L	0.010	02/17/21 21:07	
EPA 6020B	Chromium	0.00083J	mg/L	0.010	02/17/21 21:07	
EPA 6020B	Lead	0.000050J	mg/L	0.0050	02/17/21 21:07	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	02/17/21 21:07	
92521581012	**YGWA-21I(020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	6.95	Std. Units		02/23/21 08:11	
EPA 6020B	Antimony	0.0013J	mg/L	0.0030	02/17/21 21:13	B
EPA 6020B	Arsenic	0.0010J	mg/L	0.0050	02/17/21 21:13	
EPA 6020B	Barium	0.011	mg/L	0.010	02/17/21 21:13	
EPA 6020B	Cadmium	0.00041J	mg/L	0.0025	02/17/21 21:13	
EPA 6020B	Cobalt	0.0090	mg/L	0.0050	02/17/21 21:13	
EPA 6020B	Lithium	0.0060J	mg/L	0.030	02/17/21 21:13	
EPA 300.0 Rev 2.1 1993	Fluoride	0.092J	mg/L	0.10	02/12/21 16:12	
92521581013	**YGWA-3I(021021)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	7.58	Std. Units		02/23/21 08:11	
EPA 6020B	Arsenic	0.00078J	mg/L	0.0050	02/17/21 21:19	
EPA 6020B	Barium	0.0029J	mg/L	0.010	02/17/21 21:19	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521581013	**YGWA-3I(021021)**					
EPA 6020B	Lithium	0.015J	mg/L	0.030	02/17/21 21:19	
EPA 6020B	Molybdenum	0.0038J	mg/L	0.010	02/17/21 21:19	
92521581014	**YGWA-3D(021021)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	7.81	Std. Units		02/23/21 08:11	
EPA 6020B	Arsenic	0.00094J	mg/L	0.0050	02/17/21 21:25	
EPA 6020B	Barium	0.0059J	mg/L	0.010	02/17/21 21:25	
EPA 6020B	Lithium	0.023J	mg/L	0.030	02/17/21 21:25	
EPA 6020B	Molybdenum	0.014	mg/L	0.010	02/17/21 21:25	
EPA 300.0 Rev 2.1 1993	Fluoride	0.43	mg/L	0.10	02/12/21 20:11	
92521581015	**YGWA-30I(021121)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.73	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.0077J	mg/L	0.010	02/17/21 21:30	
EPA 6020B	Beryllium	0.000047J	mg/L	0.0030	02/17/21 21:30	
EPA 6020B	Cobalt	0.0078	mg/L	0.0050	02/17/21 21:30	
EPA 6020B	Lead	0.000046J	mg/L	0.0050	02/17/21 21:30	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	02/17/21 21:30	
92521581016	**FB-01(021121)**					
EPA 6020B	Lead	0.00013J	mg/L	0.0050	02/17/21 21:53	
92521578002	**YGWA-14S (021021)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.35	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.0078J	mg/L	0.010	02/23/21 20:47	
EPA 6020B	Beryllium	0.00019J	mg/L	0.0030	02/23/21 20:47	
EPA 6020B	Lead	0.000048J	mg/L	0.0050	02/23/21 20:47	
92521578010	**YGWA-1I (021221)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	6.21	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.0090J	mg/L	0.010	02/23/21 22:01	
EPA 6020B	Cobalt	0.0028J	mg/L	0.0050	02/23/21 22:01	
EPA 6020B	Lead	0.00038J	mg/L	0.0050	02/23/21 22:01	
EPA 6020B	Lithium	0.0025J	mg/L	0.030	02/23/21 22:01	
EPA 6020B	Molybdenum	0.0056J	mg/L	0.010	02/23/21 22:01	
92521578011	**YGWA-1D (021221)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	7.14	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.0057J	mg/L	0.010	02/23/21 22:07	
EPA 6020B	Cobalt	0.00086J	mg/L	0.0050	02/23/21 22:07	
EPA 6020B	Lead	0.000044J	mg/L	0.0050	02/23/21 22:07	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: YATES AMA
Pace Project No.: 92521581

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521578011	**YGWA-1D (021221)**					
EPA 6020B	Lithium	0.010J	mg/L	0.030	02/23/21 22:07	
EPA 6020B	Molybdenum	0.0080J	mg/L	0.010	02/23/21 22:07	
EPA 300.0 Rev 2.1 1993	Fluoride	0.068J	mg/L	0.10	02/16/21 19:01	
92521578003	**DUP-1 (021021)**					
EPA 6020B	Barium	0.0078J	mg/L	0.010	02/23/21 20:52	
EPA 6020B	Beryllium	0.00019J	mg/L	0.0030	02/23/21 20:52	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-5D (020821) **Lab ID: 92521581001** Collected: 02/08/21 16:45 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:42	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:42	7440-38-2	
Barium	**0.0079J**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:42	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:42	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:42	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 19:42	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:42	7440-48-4	
Lead	**0.00013J**	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:42	7439-92-1	
Lithium	**0.0063J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:42	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:42	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:42	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:42	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:29	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.055J**	mg/L	0.10	0.050	1		02/13/21 00:35	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: DUP-01(020821) **Lab ID: 92521581002** Collected: 02/08/21 00:00 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:47	7440-38-2	
Barium	**0.020**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:47	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:47	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:47	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 19:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:47	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:47	7439-92-1	
Lithium	**0.0031J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:47	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:31	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 00:50	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-5I (020821) **Lab ID: 92521581003** Collected: 02/08/21 16:20 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.67**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:53	7440-38-2	
Barium	**0.020**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:53	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:53	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:53	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 19:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:53	7440-48-4	
Lead	**0.000037J**	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:53	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:53	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:34	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 01:04	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-39 (021021) **Lab ID: 92521581004** Collected: 02/10/21 09:30 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.80**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 19:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 19:59	7440-38-2	
Barium	**0.027**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 19:59	7440-39-3	
Beryllium	**0.000051J**	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 19:59	7440-41-7	
Cadmium	**0.00019J**	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 19:59	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 19:59	7440-47-3	
Cobalt	**0.00098J**	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 19:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 19:59	7439-92-1	
Lithium	**0.0071J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 19:59	7439-93-2	
Molybdenum	**0.0013J**	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 19:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 19:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 19:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:36	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 01:19	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-40 (021021) **Lab ID: 92521581005** Collected: 02/10/21 10:50 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.19**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:05	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:05	7440-38-2	
Barium	**0.032**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:05	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:05	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:05	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:05	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:05	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:05	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:05	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:05	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:05	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:05	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:38	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 01:33	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: FB-01(021021) **Lab ID: 92521581006** Collected: 02/10/21 11:05 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00052J**	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:39	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:39	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:39	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:39	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:39	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:39	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:39	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:39	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:39	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:39	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:39	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:39	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:53	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 02:16	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-20S (020921) **Lab ID: 92521581007** Collected: 02/09/21 16:50 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.86**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00032J**	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:45	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:45	7440-38-2	
Barium	**0.015**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:45	7440-39-3	
Beryllium	**0.000068J**	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:45	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:45	7440-43-9	
Chromium	**0.00056J**	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:45	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:45	7440-48-4	
Lead	**0.000063J**	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:45	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:45	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:45	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:45	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:45	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:55	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 02:31	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-4I(020921) **Lab ID: 92521581008** Collected: 02/09/21 09:50 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**6.06**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:50	7440-38-2	
Barium	**0.013**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:50	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:50	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:50	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:50	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:50	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:50	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:50	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:50	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 11:57	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 02:45	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-17S(020921) **Lab ID: 92521581009** Collected: 02/09/21 11:15 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.62**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 20:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 20:56	7440-38-2	
Barium	**0.016**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 20:56	7440-39-3	
Beryllium	**0.000094J**	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 20:56	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 20:56	7440-43-9	
Chromium	**0.00098J**	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 20:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 20:56	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 20:56	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 20:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 20:56	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 20:56	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 20:56	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:00	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 03:29	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-18S(020921) **Lab ID: 92521581010** Collected: 02/09/21 13:25 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.43**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:02	7440-38-2	
Barium	**0.017**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:02	7440-39-3	
Beryllium	**0.000098J**	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:02	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:02	7440-43-9	
Chromium	**0.0013J**	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:02	7440-48-4	
Lead	**0.000094J**	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:02	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:02	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:02	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:02	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:02	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/13/21 03:43	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-18I(020921) **Lab ID: 92521581011** Collected: 02/09/21 14:00 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**6.12**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:07	7440-38-2	
Barium	**0.023**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:07	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:07	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:07	7440-43-9	
Chromium	**0.00083J**	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:07	7440-48-4	
Lead	**0.000050J**	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:07	7439-92-1	
Lithium	**0.0031J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:07	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:05	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 15:56	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-21I(020921) **Lab ID: 92521581012** Collected: 02/09/21 16:10 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**6.95**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0013J**	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:13	7440-36-0	B
Arsenic	**0.0010J**	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:13	7440-38-2	
Barium	**0.011**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:13	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:13	7440-41-7	
Cadmium	**0.00041J**	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:13	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:13	7440-47-3	
Cobalt	**0.0090**	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:13	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:13	7439-92-1	
Lithium	**0.0060J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:13	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:13	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:13	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:13	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:07	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.092J**	mg/L	0.10	0.050	1		02/12/21 16:12	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-3I(021021) **Lab ID: 92521581013** Collected: 02/10/21 16:40 Received: 02/11/21 13:03 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**7.58**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:19	7440-36-0	
Arsenic	**0.00078J**	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:19	7440-38-2	
Barium	**0.0029J**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:19	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:19	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:19	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:19	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:19	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:19	7439-92-1	
Lithium	**0.015J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:19	7439-93-2	
Molybdenum	**0.0038J**	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:19	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:19	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:19	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:09	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 19:55	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-3D(021021) **Lab ID: 92521581014** Collected: 02/10/21 17:25 Received: 02/11/21 13:03 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**7.81**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:25	7440-36-0	
Arsenic	**0.00094J**	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:25	7440-38-2	
Barium	**0.0059J**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:25	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:25	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:25	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:25	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:25	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:25	7439-92-1	
Lithium	**0.023J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:25	7439-93-2	
Molybdenum	**0.014**	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:25	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:25	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:25	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:12	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.43**	mg/L	0.10	0.050	1		02/12/21 20:11	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-30I(021121) **Lab ID: 92521581015** Collected: 02/11/21 09:50 Received: 02/11/21 13:03 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.73**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:30	7440-38-2	
Barium	**0.0077J**	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:30	7440-39-3	
Beryllium	**0.000047J**	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:30	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:30	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:30	7440-47-3	
Cobalt	**0.0078**	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:30	7440-48-4	
Lead	**0.000046J**	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:30	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:30	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:30	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:30	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:14	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:27	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: FB-01(021121) **Lab ID: 92521581016** Collected: 02/11/21 10:00 Received: 02/11/21 13:03 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:53	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:53	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:53	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:53	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:53	7440-48-4	
Lead	**0.00013J**	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:53	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:53	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:53	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:21	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:43	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: EB-01(021121) **Lab ID: 92521581017** Collected: 02/11/21 12:05 Received: 02/11/21 13:03 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/17/21 12:10	02/17/21 21:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/17/21 12:10	02/17/21 21:59	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/17/21 12:10	02/17/21 21:59	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/17/21 12:10	02/17/21 21:59	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/17/21 12:10	02/17/21 21:59	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/17/21 12:10	02/17/21 21:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/17/21 12:10	02/17/21 21:59	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/17/21 12:10	02/17/21 21:59	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/17/21 12:10	02/17/21 21:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/17/21 12:10	02/17/21 21:59	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/17/21 12:10	02/17/21 21:59	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/17/21 12:10	02/17/21 21:59	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/17/21 15:30	02/18/21 12:24	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 20:59	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-14S (021021) **Lab ID: 92521578002** Collected: 02/10/21 08:50 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.35**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 20:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 20:47	7440-38-2	
Barium	**0.0078J**	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 20:47	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 20:47	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 20:47	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 20:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 20:47	7440-48-4	
Lead	**0.000048J**	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 20:47	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 20:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 20:47	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 20:47	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 20:47	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:40	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:26	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-1I (021221) **Lab ID: 92521578010** Collected: 02/12/21 13:20 Received: 02/12/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**6.21**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 22:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 22:01	7440-38-2	
Barium	**0.0090J**	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 22:01	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 22:01	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 22:01	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 22:01	7440-47-3	
Cobalt	**0.0028J**	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 22:01	7440-48-4	
Lead	**0.00038J**	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 22:01	7439-92-1	
Lithium	**0.0025J**	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 22:01	7439-93-2	
Molybdenum	**0.0056J**	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 22:01	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 22:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 22:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:48	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/16/21 18:16	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: YGWA-1D (021221) **Lab ID: 92521578011** Collected: 02/12/21 11:55 Received: 02/12/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**7.14**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 22:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 22:07	7440-38-2	
Barium	**0.0057J**	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 22:07	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 22:07	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 22:07	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 22:07	7440-47-3	
Cobalt	**0.00086J**	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 22:07	7440-48-4	
Lead	**0.000044J**	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 22:07	7439-92-1	
Lithium	**0.010J**	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 22:07	7439-93-2	
Molybdenum	**0.0080J**	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 22:07	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 22:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 22:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/22/21 02:15	02/23/21 13:50	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.068J**	mg/L	0.10	0.050	1		02/16/21 19:01	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: EB-02 (021021) **Lab ID: 92521578001** Collected: 02/10/21 11:30 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 20:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 20:41	7440-38-2	
Barium	ND	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 20:41	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 20:41	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 20:41	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 20:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 20:41	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 20:41	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 20:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 20:41	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 20:41	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 20:41	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:37	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:11	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92521581

Sample: DUP-1 (021021) **Lab ID: 92521578003** Collected: 02/10/21 00:00 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/23/21 10:38	02/23/21 20:52	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/23/21 10:38	02/23/21 20:52	7440-38-2	
Barium	**0.0078J**	mg/L	0.010	0.00071	1	02/23/21 10:38	02/23/21 20:52	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.0030	0.000046	1	02/23/21 10:38	02/23/21 20:52	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/23/21 10:38	02/23/21 20:52	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/23/21 10:38	02/23/21 20:52	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/23/21 10:38	02/23/21 20:52	7440-48-4	
Lead	ND	mg/L	0.0050	0.000036	1	02/23/21 10:38	02/23/21 20:52	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/23/21 10:38	02/23/21 20:52	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/23/21 10:38	02/23/21 20:52	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/23/21 10:38	02/23/21 20:52	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/23/21 10:38	02/23/21 20:52	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 11:47	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:40	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 600633
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017

METHOD BLANK: 3165605 Matrix: Water
Associated Lab Samples: 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00031J	0.0030	0.00028	02/17/21 19:30	
Arsenic	mg/L	ND	0.0050	0.00078	02/17/21 19:30	
Barium	mg/L	ND	0.010	0.00071	02/17/21 19:30	
Beryllium	mg/L	ND	0.0030	0.000046	02/17/21 19:30	
Cadmium	mg/L	ND	0.0025	0.00012	02/17/21 19:30	
Chromium	mg/L	ND	0.010	0.00055	02/17/21 19:30	
Cobalt	mg/L	ND	0.0050	0.00038	02/17/21 19:30	
Lead	mg/L	ND	0.0050	0.000036	02/17/21 19:30	
Lithium	mg/L	ND	0.030	0.00081	02/17/21 19:30	
Molybdenum	mg/L	ND	0.010	0.00069	02/17/21 19:30	
Selenium	mg/L	ND	0.010	0.0016	02/17/21 19:30	
Thallium	mg/L	ND	0.0010	0.00014	02/17/21 19:30	

LABORATORY CONTROL SAMPLE: 3165606

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	0.098	98	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.099	99	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3165608 3165611

Parameter	Units	92521581005 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	111	109	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3165608 3165611

Parameter	Units	92521581005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Barium	mg/L	0.032	0.1	0.1	0.14	0.13	103	98	75-125	4	20	
Beryllium	mg/L	0.00021J	0.1	0.1	0.092	0.093	92	93	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	105	103	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.099	103	99	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.092	0.096	92	96	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	104	102	75-125	2	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.095	96	94	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 601867
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521578010, 92521578011

METHOD BLANK: 3171184 Matrix: Water
Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521578010, 92521578011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	02/23/21 20:30	
Arsenic	mg/L	ND	0.0050	0.00078	02/23/21 20:30	
Barium	mg/L	ND	0.010	0.00071	02/23/21 20:30	
Beryllium	mg/L	ND	0.0030	0.000046	02/23/21 20:30	
Cadmium	mg/L	ND	0.0025	0.00012	02/23/21 20:30	
Chromium	mg/L	ND	0.010	0.00055	02/23/21 20:30	
Cobalt	mg/L	ND	0.0050	0.00038	02/23/21 20:30	
Lead	mg/L	ND	0.0050	0.000036	02/23/21 20:30	
Lithium	mg/L	ND	0.030	0.00081	02/23/21 20:30	
Molybdenum	mg/L	ND	0.010	0.00069	02/23/21 20:30	
Selenium	mg/L	ND	0.010	0.0016	02/23/21 20:30	
Thallium	mg/L	ND	0.0010	0.00014	02/23/21 20:30	

LABORATORY CONTROL SAMPLE: 3171185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	108	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Cadmium	mg/L	0.1	0.10	103	80-120	
Chromium	mg/L	0.1	0.10	100	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.099	99	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	0.090	90	80-120	
Thallium	mg/L	0.1	0.095	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171186 3171187

Parameter	Units	92521578009 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	110	108	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Barium	mg/L	0.078	0.1	0.1	0.18	0.18	105	99	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.093	0.096	93	96	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171186 3171187

Parameter	Units	92521578009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	0.00052J	0.1	0.1	0.10	0.10	103	104	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	2	20	
Lithium	mg/L	0.0070J	0.1	0.1	0.10	0.10	93	93	75-125	1	20	
Molybdenum	mg/L	0.0012J	0.1	0.1	0.10	0.10	102	102	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.095	97	95	75-125	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3171188 3171189

Parameter	Units	92521578011 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	0.11	103	106	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.093	0.096	93	96	75-125	3	20	
Barium	mg/L	0.0057J	0.1	0.1	0.10	0.10	95	97	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.090	0.093	90	93	75-125	4	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	103	75-125	5	20	
Chromium	mg/L	ND	0.1	0.1	0.096	0.099	96	98	75-125	3	20	
Cobalt	mg/L	0.00086J	0.1	0.1	0.093	0.097	92	96	75-125	4	20	
Lead	mg/L	0.000044J	0.1	0.1	0.094	0.098	94	98	75-125	3	20	
Lithium	mg/L	0.010J	0.1	0.1	0.10	0.11	90	96	75-125	5	20	
Molybdenum	mg/L	0.0080J	0.1	0.1	0.10	0.11	95	99	75-125	3	20	
Selenium	mg/L	ND	0.1	0.1	0.086	0.089	86	89	75-125	3	20	
Thallium	mg/L	ND	0.1	0.1	0.092	0.095	92	95	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 600023
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521578001, 92521578002, 92521578003

METHOD BLANK: 3163248 Matrix: Water
Associated Lab Samples: 92521578001, 92521578002, 92521578003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/16/21 11:30	

LABORATORY CONTROL SAMPLE: 3163249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3163250 3163251

Parameter	Units	92521578009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0023	94	92	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 600356 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017

METHOD BLANK: 3164655 Matrix: Water
Associated Lab Samples: 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010, 92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/18/21 11:24	

LABORATORY CONTROL SAMPLE: 3164656

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164657 3164658

Parameter	Units	92521581005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	97	96	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 601295
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521578010, 92521578011

METHOD BLANK: 3168813 Matrix: Water
Associated Lab Samples: 92521578010, 92521578011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/23/21 13:14	

LABORATORY CONTROL SAMPLE: 3168814

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3168815 3168816

Parameter	Units	92521578011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0022	0.0022	88	89	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 599663 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010

METHOD BLANK: 3161251 Matrix: Water
Associated Lab Samples: 92521578001, 92521578002, 92521578003, 92521581001, 92521581002, 92521581003, 92521581004, 92521581005, 92521581006, 92521581007, 92521581008, 92521581009, 92521581010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/12/21 20:16	

LABORATORY CONTROL SAMPLE: 3161252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161253 3161254

Parameter	Units	92521574009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.7	2.7	109	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161255 3161256

Parameter	Units	92521581005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.5	2.7	100	108	90-110	8	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 599664 Analysis Method: EPA 300.0 Rev 2.1 1993
QC Batch Method: EPA 300.0 Rev 2.1 1993 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017

METHOD BLANK: 3161257 Matrix: Water
Associated Lab Samples: 92521581011, 92521581012, 92521581013, 92521581014, 92521581015, 92521581016, 92521581017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/12/21 15:24	

LABORATORY CONTROL SAMPLE: 3161258

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161259 3161260

Parameter	Units	92521578009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.066J	2.5	2.5	2.4	2.5	93	99	90-110	6	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161575 3161576

Parameter	Units	92521143010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.21	2.5	2.5	2.3	2.5	84	91	90-110	7	10	M1

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92521581

QC Batch: 600235
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: 92521578010, 92521578011

METHOD BLANK: 3164171 Matrix: Water
Associated Lab Samples: 92521578010, 92521578011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/16/21 14:16	

LABORATORY CONTROL SAMPLE: 3164172

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.4	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164173 3164174

Parameter	Units	92522138001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	ND	2.5	2.5	2.4	2.5	95	97	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3164175 3164176

Parameter	Units	92521578011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.068J	2.5	2.5	2.6	2.6	100	100	90-110	1	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES AMA
Pace Project No.: 92521581

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA
Pace Project No.: 92521581

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521578002	**YGWA-14S (021021)**				
92521581003	**YGWA-5I (020821)**				
92521581004	**YGWA-39 (021021)**				
92521581005	**YGWA-40 (021021)**				
92521581007	**YGWA-20S (020921)**				
92521581008	**YGWA-4I(020921)**				
92521581009	**YGWA-17S(020921)**				
92521581010	**YGWA-18S(020921)**				
92521581011	**YGWA-18I(020921)**				
92521581012	**YGWA-21I(020921)**				
92521581013	**YGWA-3I(021021)**				
92521581014	**YGWA-3D(021021)**				
92521581015	**YGWA-30I(021121)**				
92521578010	**YGWA-1I (021221)**				
92521578011	**YGWA-1D (021221)**				
92521578001	**EB-02 (021021)**	EPA 3005A	601867	EPA 6020B	601989
92521578002	**YGWA-14S (021021)**	EPA 3005A	601867	EPA 6020B	601989
92521578003	**DUP-1 (021021)**	EPA 3005A	601867	EPA 6020B	601989
92521581001	**YGWA-5D (020821)**	EPA 3005A	600633	EPA 6020B	600737
92521581002	**DUP-01(020821)**	EPA 3005A	600633	EPA 6020B	600737
92521581003	**YGWA-5I (020821)**	EPA 3005A	600633	EPA 6020B	600737
92521581004	**YGWA-39 (021021)**	EPA 3005A	600633	EPA 6020B	600737
92521581005	**YGWA-40 (021021)**	EPA 3005A	600633	EPA 6020B	600737
92521581006	**FB-01(021021)**	EPA 3005A	600633	EPA 6020B	600737
92521581007	**YGWA-20S (020921)**	EPA 3005A	600633	EPA 6020B	600737
92521581008	**YGWA-4I(020921)**	EPA 3005A	600633	EPA 6020B	600737
92521581009	**YGWA-17S(020921)**	EPA 3005A	600633	EPA 6020B	600737
92521581010	**YGWA-18S(020921)**	EPA 3005A	600633	EPA 6020B	600737
92521581011	**YGWA-18I(020921)**	EPA 3005A	600633	EPA 6020B	600737
92521581012	**YGWA-21I(020921)**	EPA 3005A	600633	EPA 6020B	600737
92521581013	**YGWA-3I(021021)**	EPA 3005A	600633	EPA 6020B	600737
92521581014	**YGWA-3D(021021)**	EPA 3005A	600633	EPA 6020B	600737
92521581015	**YGWA-30I(021121)**	EPA 3005A	600633	EPA 6020B	600737
92521581016	**FB-01(021121)**	EPA 3005A	600633	EPA 6020B	600737
92521581017	**EB-01(021121)**	EPA 3005A	600633	EPA 6020B	600737
92521578010	**YGWA-1I (021221)**	EPA 3005A	601867	EPA 6020B	601989
92521578011	**YGWA-1D (021221)**	EPA 3005A	601867	EPA 6020B	601989
92521578001	**EB-02 (021021)**	EPA 7470A	600023	EPA 7470A	600226
92521578002	**YGWA-14S (021021)**	EPA 7470A	600023	EPA 7470A	600226
92521578003	**DUP-1 (021021)**	EPA 7470A	600023	EPA 7470A	600226
92521581001	**YGWA-5D (020821)**	EPA 7470A	600356	EPA 7470A	600864
92521581002	**DUP-01(020821)**	EPA 7470A	600356	EPA 7470A	600864
92521581003	**YGWA-5I (020821)**	EPA 7470A	600356	EPA 7470A	600864
92521581004	**YGWA-39 (021021)**	EPA 7470A	600356	EPA 7470A	600864
92521581005	**YGWA-40 (021021)**	EPA 7470A	600356	EPA 7470A	600864
92521581006	**FB-01(021021)**	EPA 7470A	600356	EPA 7470A	600864

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA
Pace Project No.: 92521581

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521581007	**YGWA-20S (020921)**	EPA 7470A	600356	EPA 7470A	600864
92521581008	**YGWA-4I(020921)**	EPA 7470A	600356	EPA 7470A	600864
92521581009	**YGWA-17S(020921)**	EPA 7470A	600356	EPA 7470A	600864
92521581010	**YGWA-18S(020921)**	EPA 7470A	600356	EPA 7470A	600864
92521581011	**YGWA-18I(020921)**	EPA 7470A	600356	EPA 7470A	600864
92521581012	**YGWA-21I(020921)**	EPA 7470A	600356	EPA 7470A	600864
92521581013	**YGWA-3I(021021)**	EPA 7470A	600356	EPA 7470A	600864
92521581014	**YGWA-3D(021021)**	EPA 7470A	600356	EPA 7470A	600864
92521581015	**YGWA-30I(021121)**	EPA 7470A	600356	EPA 7470A	600864
92521581016	**FB-01(021121)**	EPA 7470A	600356	EPA 7470A	600864
92521581017	**EB-01(021121)**	EPA 7470A	600356	EPA 7470A	600864
92521578010	**YGWA-1I (021221)**	EPA 7470A	601295	EPA 7470A	601814
92521578011	**YGWA-1D (021221)**	EPA 7470A	601295	EPA 7470A	601814
92521578001	**EB-02 (021021)**	EPA 300.0 Rev 2.1 1993	599663		
92521578002	**YGWA-14S (021021)**	EPA 300.0 Rev 2.1 1993	599663		
92521578003	**DUP-1 (021021)**	EPA 300.0 Rev 2.1 1993	599663		
92521581001	**YGWA-5D (020821)**	EPA 300.0 Rev 2.1 1993	599663		
92521581002	**DUP-01(020821)**	EPA 300.0 Rev 2.1 1993	599663		
92521581003	**YGWA-5I (020821)**	EPA 300.0 Rev 2.1 1993	599663		
92521581004	**YGWA-39 (021021)**	EPA 300.0 Rev 2.1 1993	599663		
92521581005	**YGWA-40 (021021)**	EPA 300.0 Rev 2.1 1993	599663		
92521581006	**FB-01(021021)**	EPA 300.0 Rev 2.1 1993	599663		
92521581007	**YGWA-20S (020921)**	EPA 300.0 Rev 2.1 1993	599663		
92521581008	**YGWA-4I(020921)**	EPA 300.0 Rev 2.1 1993	599663		
92521581009	**YGWA-17S(020921)**	EPA 300.0 Rev 2.1 1993	599663		
92521581010	**YGWA-18S(020921)**	EPA 300.0 Rev 2.1 1993	599663		
92521581011	**YGWA-18I(020921)**	EPA 300.0 Rev 2.1 1993	599664		
92521581012	**YGWA-21I(020921)**	EPA 300.0 Rev 2.1 1993	599664		
92521581013	**YGWA-3I(021021)**	EPA 300.0 Rev 2.1 1993	599664		
92521581014	**YGWA-3D(021021)**	EPA 300.0 Rev 2.1 1993	599664		
92521581015	**YGWA-30I(021121)**	EPA 300.0 Rev 2.1 1993	599664		
92521581016	**FB-01(021121)**	EPA 300.0 Rev 2.1 1993	599664		
92521581017	**EB-01(021121)**	EPA 300.0 Rev 2.1 1993	599664		
92521578010	**YGWA-1I (021221)**	EPA 300.0 Rev 2.1 1993	600235		
92521578011	**YGWA-1D (021221)**	EPA 300.0 Rev 2.1 1993	600235		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCR)	Document Revised: October 31, 2008 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.01	Issuing Authority: Pace Carolinas Quality Office

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

Client Name: GHPower

Project #: WO# : 92521581

Courier:
☐ Commercial ☐ Pace ☐ GH ☐ SCS ☐ USPS ☐ Client ☐ Other ____

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

Date/Initials Person Examining Contents: 2/18/11

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

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

Thermometer:
☐ IR Gun ID 230 ☐ Probe ☐ None

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp 2.1 Correction Factor: Add/Subtract (°C) 0.0

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

Cooler Temp Corrected (°C) 2.1

USDA Regulated Soil | ☐ N/A, water sample

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

Did samples originate outside the United States (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
Unpreserved 5035A Soils Frozen?	☐ Yes	☐ No	☑ N/A	8
Samples Labeled Correctly?	☑ Yes	☐ No	☐ N/A	9
Matrix: W				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

Comments/Discrepancy:

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

Project Manager Review:

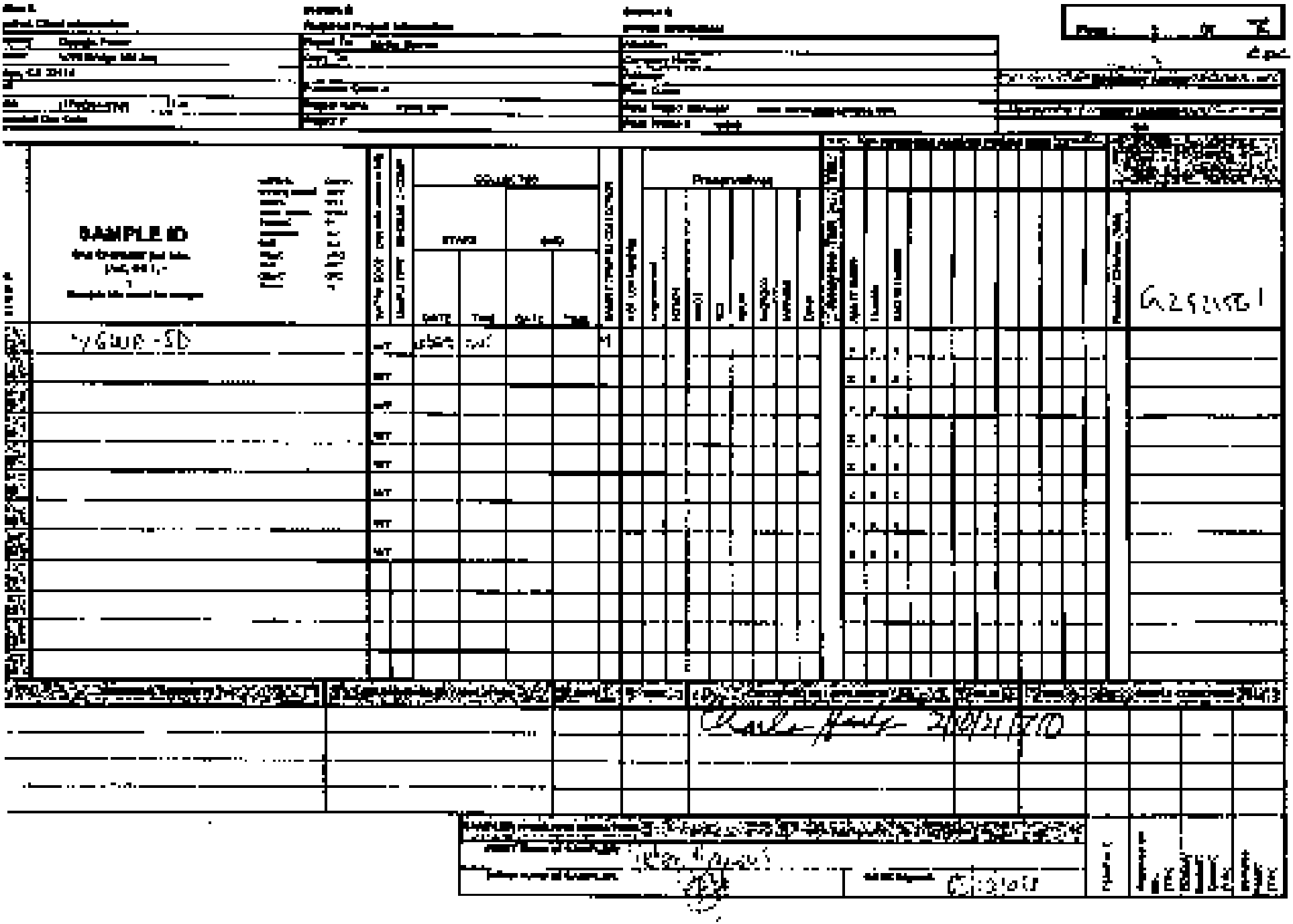
Date:

Project Manager (if different than PM Review):

Date:

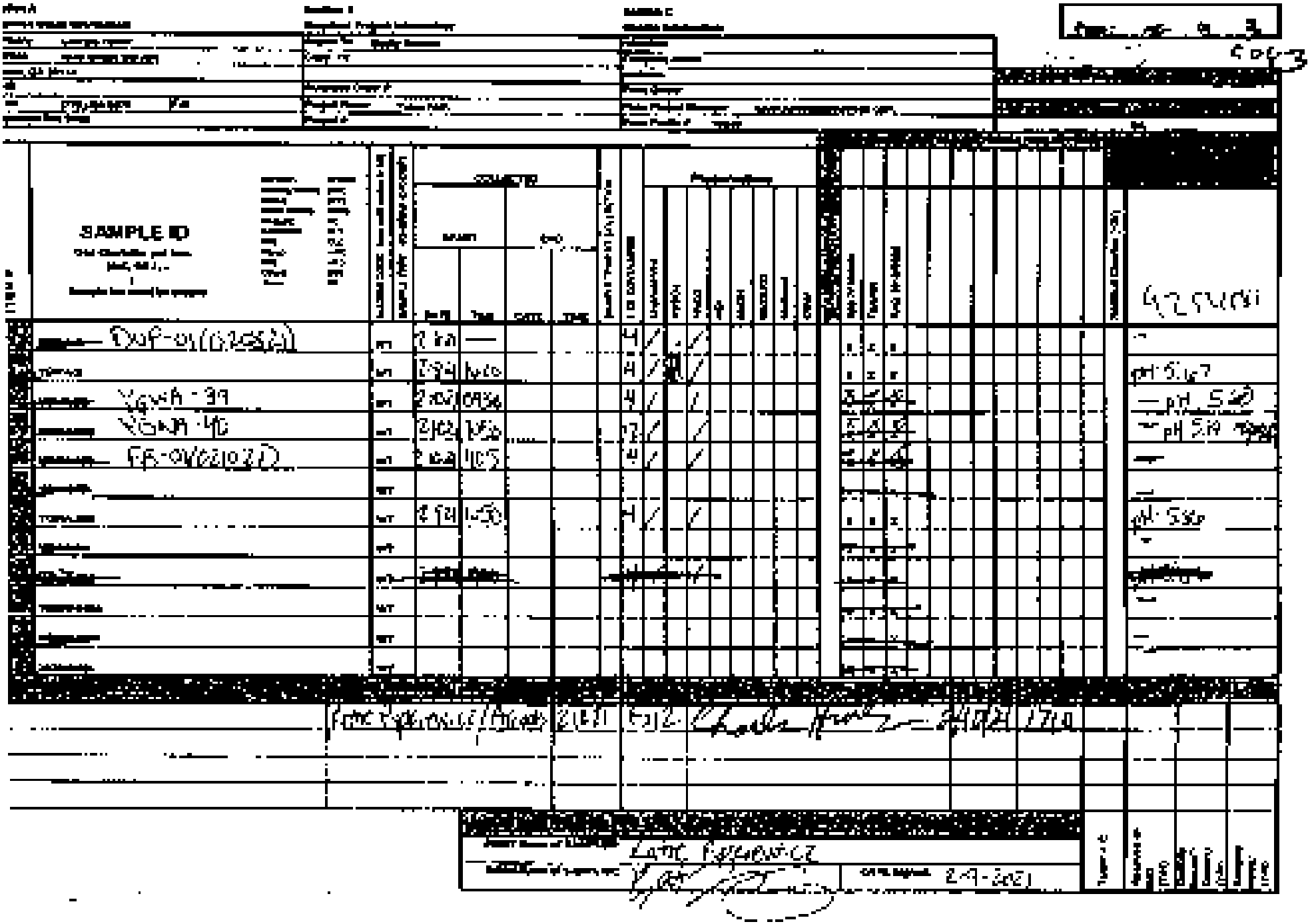
CHAIN-OF-CUSTODY / Analytical Request Document

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



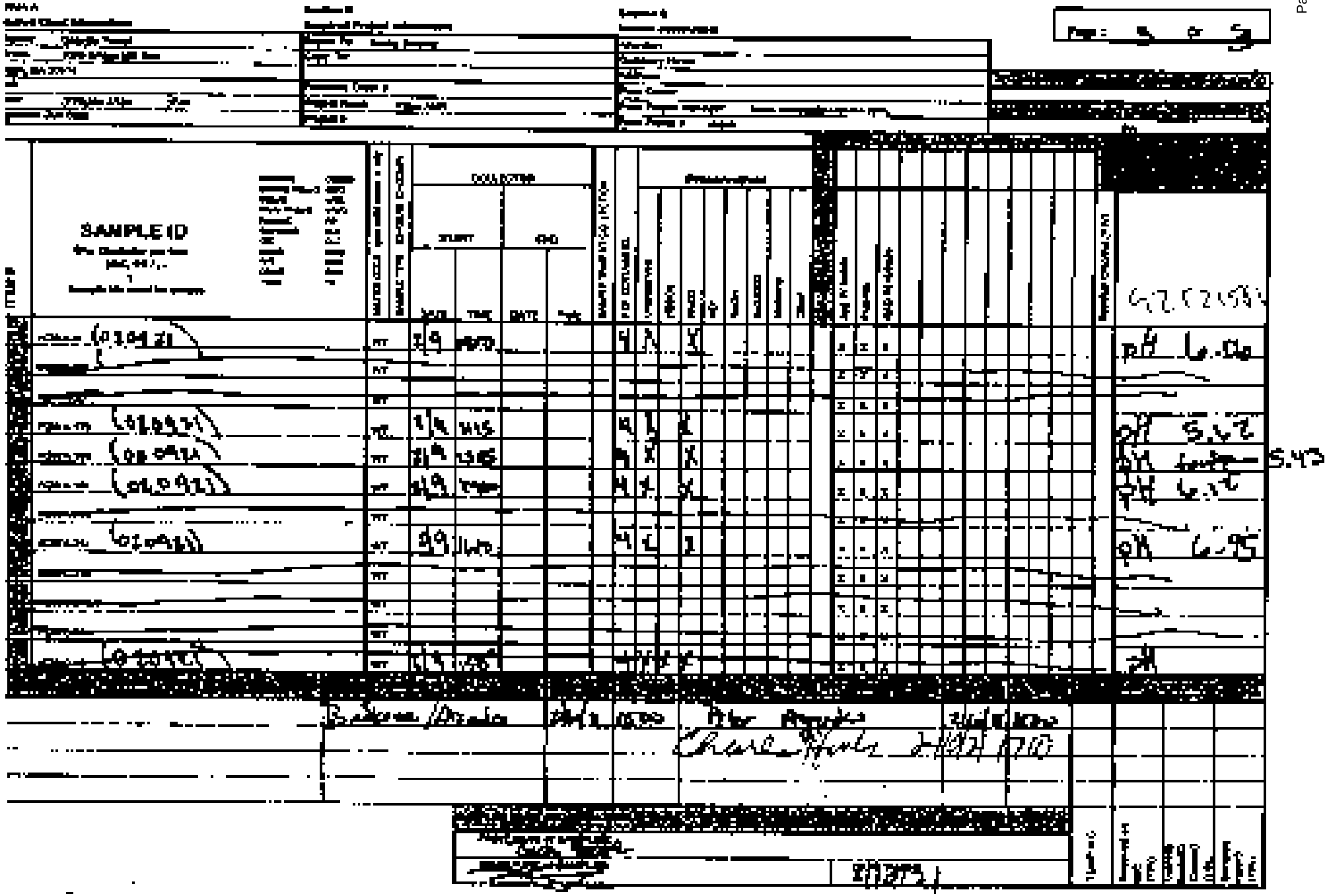
CHAIN-OF-CUSTODY / Analytical Request Document

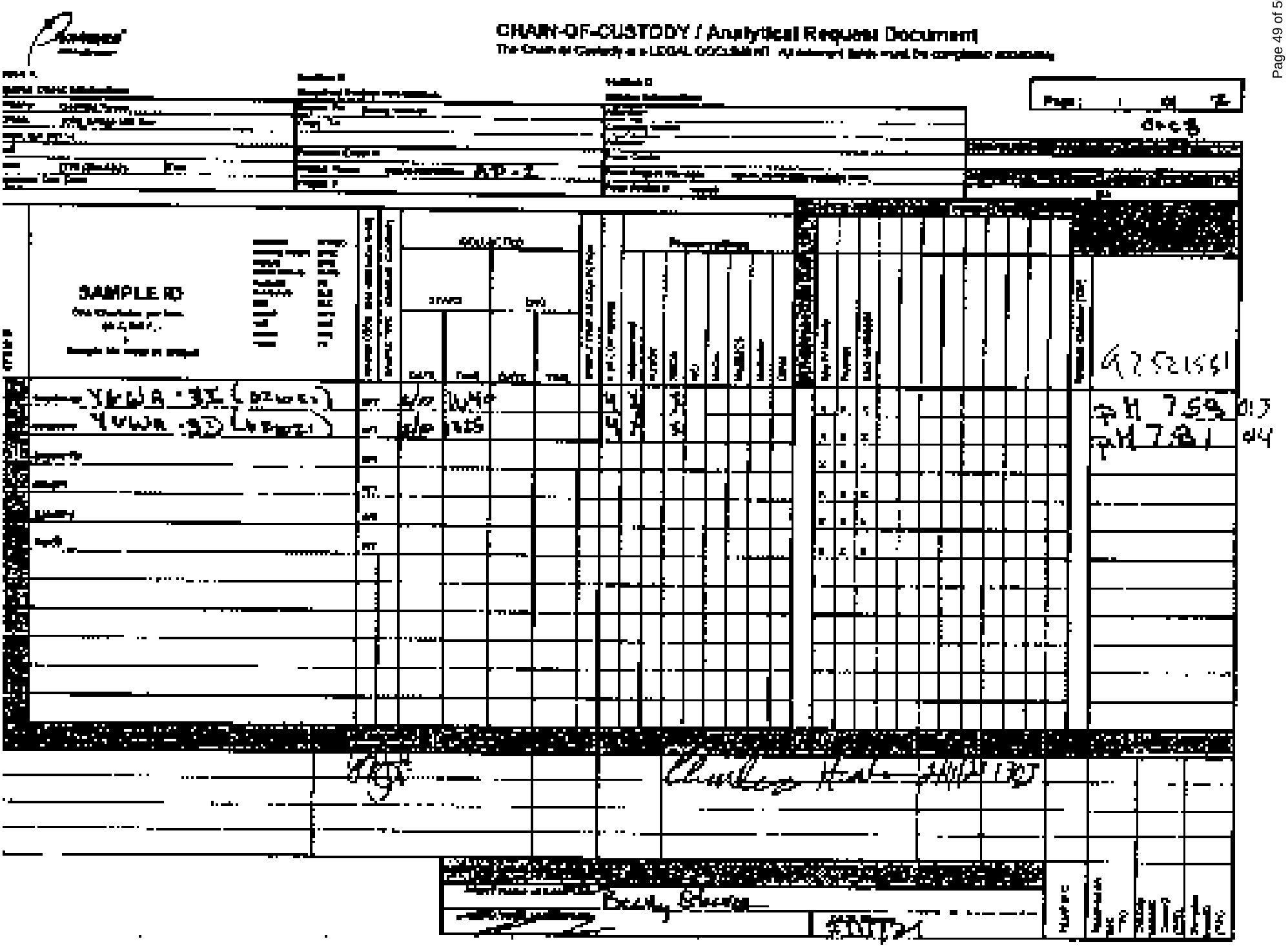
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.



CHAIN-OF-CUSTODY / Analytical Request Document

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





CHAIN-OF-CUSTODY / Analytical Request Document

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SAMPLE ID

CHAIN-OF-CUSTODY / Analytical Request Document

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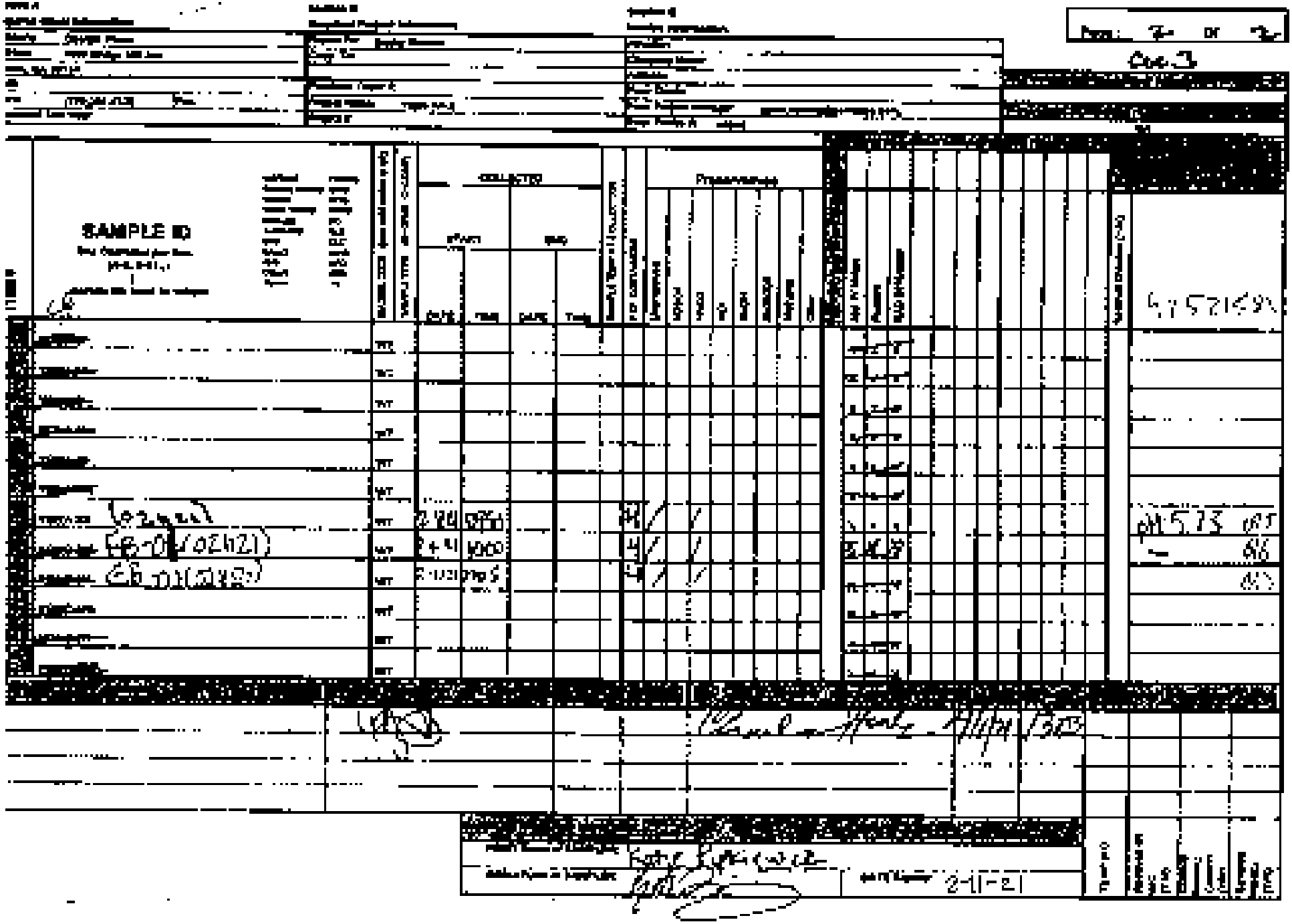

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

February 25, 2021

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

RE: Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 11, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

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SAMPLE SUMMARY

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521583001	**PZ-37 (020921)**	Water	02/09/21 09:30	02/10/21 17:10
92521583003	**YAMW-2 (020921)**	Water	02/09/21 12:45	02/10/21 17:10
92521583004	**YAMW-4 (020921)**	Water	02/09/21 10:20	02/10/21 17:10
92521583005	**YAMW-5 (020921)**	Water	02/09/21 09:45	02/10/21 17:10
92521583006	**YAMW-1 (020921)**	Water	02/09/21 14:10	02/10/21 17:10
92521583007	**PZ-35(021021)**	Water	02/10/21 16:15	02/11/21 13:03

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SAMPLE ANALYTE COUNT

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92521583001	**PZ-37 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521583003	**YAMW-2 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521583004	**YAMW-4 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521583005	**YAMW-5 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521583006	**YAMW-1 (020921)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1
92521583007	**PZ-35(021021)**	EPA 6020B	CW1	12
		EPA 7470A	VB	1
		EPA 300.0 Rev 2.1 1993	CDC	1

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

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SUMMARY OF DETECTION

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521583001	**PZ-37 (020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.42	Std. Units		02/23/21 08:11	
EPA 6020B	Antimony	0.00035J	mg/L	0.0030	02/19/21 19:04	
EPA 6020B	Arsenic	0.0015J	mg/L	0.0050	02/19/21 19:04	
EPA 6020B	Barium	0.036	mg/L	0.010	02/19/21 19:04	
EPA 6020B	Beryllium	0.00029J	mg/L	0.0030	02/19/21 19:04	
EPA 6020B	Cadmium	0.00042J	mg/L	0.0025	02/19/21 19:04	
EPA 6020B	Cobalt	0.0023J	mg/L	0.0050	02/19/21 19:04	
EPA 6020B	Lead	0.000088J	mg/L	0.0050	02/19/21 19:04	
EPA 6020B	Lithium	0.024J	mg/L	0.030	02/19/21 19:04	
EPA 6020B	Molybdenum	0.0016J	mg/L	0.010	02/19/21 19:04	
EPA 6020B	Selenium	0.28	mg/L	0.010	02/19/21 19:04	
92521583003	**YAMW-2 (020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.81	Std. Units		02/23/21 08:11	
EPA 6020B	Barium	0.0085J	mg/L	0.010	02/19/21 19:32	
EPA 6020B	Beryllium	0.000051J	mg/L	0.0030	02/19/21 19:32	
EPA 6020B	Chromium	0.0011J	mg/L	0.010	02/19/21 19:32	
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	02/19/21 19:32	
EPA 6020B	Lead	0.00011J	mg/L	0.0050	02/19/21 19:32	
92521583004	**YAMW-4 (020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	6.96	Std. Units		02/23/21 08:11	
EPA 6020B	Antimony	0.0011J	mg/L	0.0030	02/19/21 19:38	
EPA 6020B	Arsenic	0.0010J	mg/L	0.0050	02/19/21 19:38	
EPA 6020B	Barium	0.020	mg/L	0.010	02/19/21 19:38	
EPA 6020B	Chromium	0.00057J	mg/L	0.010	02/19/21 19:38	
EPA 6020B	Cobalt	0.00063J	mg/L	0.0050	02/19/21 19:38	
EPA 6020B	Lead	0.00054J	mg/L	0.0050	02/19/21 19:38	
EPA 6020B	Lithium	0.018J	mg/L	0.030	02/19/21 19:38	
EPA 6020B	Molybdenum	0.0068J	mg/L	0.010	02/19/21 19:38	
EPA 300.0 Rev 2.1 1993	Fluoride	0.14	mg/L	0.10	02/12/21 17:16	
92521583005	**YAMW-5 (020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.34	Std. Units		02/23/21 08:11	
EPA 6020B	Arsenic	0.00095J	mg/L	0.0050	02/19/21 19:44	
EPA 6020B	Barium	0.042	mg/L	0.010	02/19/21 19:44	
EPA 6020B	Beryllium	0.00015J	mg/L	0.0030	02/19/21 19:44	
EPA 6020B	Cadmium	0.00025J	mg/L	0.0025	02/19/21 19:44	
EPA 6020B	Lead	0.000073J	mg/L	0.0050	02/19/21 19:44	
EPA 6020B	Lithium	0.016J	mg/L	0.030	02/19/21 19:44	
EPA 6020B	Selenium	0.060	mg/L	0.010	02/19/21 19:44	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521583006	**YAMW-1 (020921)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	6.42	Std. Units		02/23/21 08:11	
EPA 6020B	Antimony	0.00037J	mg/L	0.0030	02/19/21 20:01	
EPA 6020B	Barium	0.039	mg/L	0.010	02/19/21 20:01	
EPA 6020B	Cadmium	0.00013J	mg/L	0.0025	02/19/21 20:01	
EPA 6020B	Chromium	0.0010J	mg/L	0.010	02/19/21 20:01	
EPA 6020B	Cobalt	0.030	mg/L	0.0050	02/19/21 20:01	
EPA 6020B	Lead	0.00019J	mg/L	0.0050	02/19/21 20:01	
EPA 6020B	Lithium	0.021J	mg/L	0.030	02/19/21 20:01	
EPA 6020B	Molybdenum	0.0038J	mg/L	0.010	02/19/21 20:01	
92521583007	**PZ-35(021021)**					
	Performed by	CUSTOMER			02/23/21 08:11	
	pH	5.53	Std. Units		02/23/21 08:11	
EPA 6020B	Arsenic	0.00096J	mg/L	0.0050	02/19/21 20:07	
EPA 6020B	Barium	0.032	mg/L	0.010	02/19/21 20:07	
EPA 6020B	Beryllium	0.00025J	mg/L	0.0030	02/19/21 20:07	
EPA 6020B	Chromium	0.00060J	mg/L	0.010	02/19/21 20:07	
EPA 6020B	Lead	0.000087J	mg/L	0.0050	02/19/21 20:07	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	02/19/21 20:07	

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ANALYTICAL RESULTS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Sample: PZ-37 (020921) **Lab ID: 92521583001** Collected: 02/09/21 09:30 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.42**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00035J**	mg/L	0.0030	0.00028	1	02/18/21 11:04	02/19/21 19:04	7440-36-0	
Arsenic	**0.0015J**	mg/L	0.0050	0.00078	1	02/18/21 11:04	02/19/21 19:04	7440-38-2	
Barium	**0.036**	mg/L	0.010	0.00071	1	02/18/21 11:04	02/19/21 19:04	7440-39-3	
Beryllium	**0.00029J**	mg/L	0.0030	0.000046	1	02/18/21 11:04	02/19/21 19:04	7440-41-7	
Cadmium	**0.00042J**	mg/L	0.0025	0.00012	1	02/18/21 11:04	02/19/21 19:04	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/18/21 11:04	02/19/21 19:04	7440-47-3	
Cobalt	**0.0023J**	mg/L	0.0050	0.00038	1	02/18/21 11:04	02/19/21 19:04	7440-48-4	
Lead	**0.000088J**	mg/L	0.0050	0.000036	1	02/18/21 11:04	02/19/21 19:04	7439-92-1	
Lithium	**0.024J**	mg/L	0.030	0.00081	1	02/18/21 11:04	02/19/21 19:04	7439-93-2	
Molybdenum	**0.0016J**	mg/L	0.010	0.00069	1	02/18/21 11:04	02/19/21 19:04	7439-98-7	
Selenium	**0.28**	mg/L	0.010	0.0016	1	02/18/21 11:04	02/19/21 19:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/18/21 11:04	02/19/21 19:04	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:01	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 16:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Sample: YAMW-2 (020921) **Lab ID: 92521583003** Collected: 02/09/21 12:45 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.81**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/18/21 11:04	02/19/21 19:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/18/21 11:04	02/19/21 19:32	7440-38-2	
Barium	**0.0085J**	mg/L	0.010	0.00071	1	02/18/21 11:04	02/19/21 19:32	7440-39-3	
Beryllium	**0.000051J**	mg/L	0.0030	0.000046	1	02/18/21 11:04	02/19/21 19:32	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/18/21 11:04	02/19/21 19:32	7440-43-9	
Chromium	**0.0011J**	mg/L	0.010	0.00055	1	02/18/21 11:04	02/19/21 19:32	7440-47-3	
Cobalt	**0.0010J**	mg/L	0.0050	0.00038	1	02/18/21 11:04	02/19/21 19:32	7440-48-4	
Lead	**0.00011J**	mg/L	0.0050	0.000036	1	02/18/21 11:04	02/19/21 19:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	02/18/21 11:04	02/19/21 19:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/18/21 11:04	02/19/21 19:32	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/18/21 11:04	02/19/21 19:32	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/18/21 11:04	02/19/21 19:32	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:06	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 17:00	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Sample: YAMW-4 (020921) **Lab ID: 92521583004** Collected: 02/09/21 10:20 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**6.96**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0011J**	mg/L	0.0030	0.00028	1	02/18/21 11:04	02/19/21 19:38	7440-36-0	
Arsenic	**0.0010J**	mg/L	0.0050	0.00078	1	02/18/21 11:04	02/19/21 19:38	7440-38-2	
Barium	**0.020**	mg/L	0.010	0.00071	1	02/18/21 11:04	02/19/21 19:38	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/18/21 11:04	02/19/21 19:38	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/18/21 11:04	02/19/21 19:38	7440-43-9	
Chromium	**0.00057J**	mg/L	0.010	0.00055	1	02/18/21 11:04	02/19/21 19:38	7440-47-3	
Cobalt	**0.00063J**	mg/L	0.0050	0.00038	1	02/18/21 11:04	02/19/21 19:38	7440-48-4	
Lead	**0.00054J**	mg/L	0.0050	0.000036	1	02/18/21 11:04	02/19/21 19:38	7439-92-1	
Lithium	**0.018J**	mg/L	0.030	0.00081	1	02/18/21 11:04	02/19/21 19:38	7439-93-2	
Molybdenum	**0.0068J**	mg/L	0.010	0.00069	1	02/18/21 11:04	02/19/21 19:38	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/18/21 11:04	02/19/21 19:38	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/18/21 11:04	02/19/21 19:38	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:08	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	**0.14**	mg/L	0.10	0.050	1		02/12/21 17:16	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Sample: YAMW-5 (020921) **Lab ID: 92521583005** Collected: 02/09/21 09:45 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.34**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/18/21 11:04	02/19/21 19:44	7440-36-0	
Arsenic	**0.00095J**	mg/L	0.0050	0.00078	1	02/18/21 11:04	02/19/21 19:44	7440-38-2	
Barium	**0.042**	mg/L	0.010	0.00071	1	02/18/21 11:04	02/19/21 19:44	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.0030	0.000046	1	02/18/21 11:04	02/19/21 19:44	7440-41-7	
Cadmium	**0.00025J**	mg/L	0.0025	0.00012	1	02/18/21 11:04	02/19/21 19:44	7440-43-9	
Chromium	ND	mg/L	0.010	0.00055	1	02/18/21 11:04	02/19/21 19:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/18/21 11:04	02/19/21 19:44	7440-48-4	
Lead	**0.000073J**	mg/L	0.0050	0.000036	1	02/18/21 11:04	02/19/21 19:44	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00081	1	02/18/21 11:04	02/19/21 19:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/18/21 11:04	02/19/21 19:44	7439-98-7	
Selenium	**0.060**	mg/L	0.010	0.0016	1	02/18/21 11:04	02/19/21 19:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/18/21 11:04	02/19/21 19:44	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:15	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 17:32	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Sample: YAMW-1 (020921) **Lab ID: 92521583006** Collected: 02/09/21 14:10 Received: 02/10/21 17:10 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**6.42**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00037J**	mg/L	0.0030	0.00028	1	02/18/21 11:04	02/19/21 20:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	02/18/21 11:04	02/19/21 20:01	7440-38-2	
Barium	**0.039**	mg/L	0.010	0.00071	1	02/18/21 11:04	02/19/21 20:01	7440-39-3	
Beryllium	ND	mg/L	0.0030	0.000046	1	02/18/21 11:04	02/19/21 20:01	7440-41-7	
Cadmium	**0.00013J**	mg/L	0.0025	0.00012	1	02/18/21 11:04	02/19/21 20:01	7440-43-9	
Chromium	**0.0010J**	mg/L	0.010	0.00055	1	02/18/21 11:04	02/19/21 20:01	7440-47-3	
Cobalt	**0.030**	mg/L	0.0050	0.00038	1	02/18/21 11:04	02/19/21 20:01	7440-48-4	
Lead	**0.00019J**	mg/L	0.0050	0.000036	1	02/18/21 11:04	02/19/21 20:01	7439-92-1	
Lithium	**0.021J**	mg/L	0.030	0.00081	1	02/18/21 11:04	02/19/21 20:01	7439-93-2	
Molybdenum	**0.0038J**	mg/L	0.010	0.00069	1	02/18/21 11:04	02/19/21 20:01	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/18/21 11:04	02/19/21 20:01	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/18/21 11:04	02/19/21 20:01	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:18	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 17:48	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Sample: PZ-35(021021) **Lab ID: 92521583007** Collected: 02/10/21 16:15 Received: 02/11/21 13:03 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		02/23/21 08:11		
pH	**5.53**	Std. Units			1		02/23/21 08:11		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	02/18/21 11:04	02/19/21 20:07	7440-36-0	
Arsenic	**0.00096J**	mg/L	0.0050	0.00078	1	02/18/21 11:04	02/19/21 20:07	7440-38-2	
Barium	**0.032**	mg/L	0.010	0.00071	1	02/18/21 11:04	02/19/21 20:07	7440-39-3	
Beryllium	**0.00025J**	mg/L	0.0030	0.000046	1	02/18/21 11:04	02/19/21 20:07	7440-41-7	
Cadmium	ND	mg/L	0.0025	0.00012	1	02/18/21 11:04	02/19/21 20:07	7440-43-9	
Chromium	**0.00060J**	mg/L	0.010	0.00055	1	02/18/21 11:04	02/19/21 20:07	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	02/18/21 11:04	02/19/21 20:07	7440-48-4	
Lead	**0.000087J**	mg/L	0.0050	0.000036	1	02/18/21 11:04	02/19/21 20:07	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00081	1	02/18/21 11:04	02/19/21 20:07	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	02/18/21 11:04	02/19/21 20:07	7439-98-7	
Selenium	ND	mg/L	0.010	0.0016	1	02/18/21 11:04	02/19/21 20:07	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	02/18/21 11:04	02/19/21 20:07	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00050	0.000078	1	02/15/21 15:30	02/16/21 12:22	7439-97-6	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Fluoride	ND	mg/L	0.10	0.050	1		02/12/21 22:03	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

QC Batch: 600920
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521583001, 92521583003, 92521583004, 92521583005, 92521583006, 92521583007

METHOD BLANK: 3167301 Matrix: Water
Associated Lab Samples: 92521583001, 92521583003, 92521583004, 92521583005, 92521583006, 92521583007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	02/19/21 18:52	
Arsenic	mg/L	ND	0.0050	0.00078	02/19/21 18:52	
Barium	mg/L	ND	0.010	0.00071	02/19/21 18:52	
Beryllium	mg/L	ND	0.0030	0.000046	02/19/21 18:52	
Cadmium	mg/L	ND	0.0025	0.00012	02/19/21 18:52	
Chromium	mg/L	ND	0.010	0.00055	02/19/21 18:52	
Cobalt	mg/L	ND	0.0050	0.00038	02/19/21 18:52	
Lead	mg/L	ND	0.0050	0.000036	02/19/21 18:52	
Lithium	mg/L	ND	0.030	0.00081	02/19/21 18:52	
Molybdenum	mg/L	ND	0.010	0.00069	02/19/21 18:52	
Selenium	mg/L	ND	0.010	0.0016	02/19/21 18:52	
Thallium	mg/L	ND	0.0010	0.00014	02/19/21 18:52	

LABORATORY CONTROL SAMPLE: 3167302

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	111	80-120	
Arsenic	mg/L	0.1	0.10	101	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	101	80-120	
Cobalt	mg/L	0.1	0.098	98	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	105	80-120	
Molybdenum	mg/L	0.1	0.10	104	80-120	
Selenium	mg/L	0.1	0.095	95	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3167303 3167304

Parameter	Units	92521583001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00035J	0.1	0.1	0.12	0.11	117	110	75-125	5	20	
Arsenic	mg/L	0.0015J	0.1	0.1	0.11	0.10	106	103	75-125	2	20	
Barium	mg/L	0.036	0.1	0.1	0.14	0.13	104	95	75-125	7	20	
Beryllium	mg/L	0.00029J	0.1	0.1	0.095	0.088	95	88	75-125	7	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3167303 3167304

Parameter	Units	92521583001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	0.00042J	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.11	0.10	106	104	75-125	1	20	
Cobalt	mg/L	0.0023J	0.1	0.1	0.10	0.10	103	102	75-125	0	20	
Lead	mg/L	0.000088J	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Lithium	mg/L	0.024J	0.1	0.1	0.12	0.11	98	88	75-125	8	20	
Molybdenum	mg/L	0.0016J	0.1	0.1	0.11	0.11	108	108	75-125	1	20	
Selenium	mg/L	0.28	0.1	0.1	0.38	0.37	106	92	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.097	0.096	97	96	75-125	1	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

QC Batch: 600023
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92521583001, 92521583003, 92521583004, 92521583005, 92521583006, 92521583007

METHOD BLANK: 3163248 Matrix: Water
Associated Lab Samples: 92521583001, 92521583003, 92521583004, 92521583005, 92521583006, 92521583007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00050	0.000078	02/16/21 11:30	

LABORATORY CONTROL SAMPLE: 3163249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3163250 3163251

Parameter	Units	92521578009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0023	94	92	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

QC Batch: 599664
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: 92521583001, 92521583003, 92521583004, 92521583005, 92521583006, 92521583007

METHOD BLANK: 3161257 Matrix: Water
Associated Lab Samples: 92521583001, 92521583003, 92521583004, 92521583005, 92521583006, 92521583007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Fluoride	mg/L	ND	0.10	0.050	02/12/21 15:24	

LABORATORY CONTROL SAMPLE: 3161258

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluoride	mg/L	2.5	2.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161259 3161260

Parameter	Units	92521578009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.066J	2.5	2.5	2.4	2.5	93	99	90-110	6	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3161575 3161576

Parameter	Units	92521143010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoride	mg/L	0.21	2.5	2.5	2.3	2.5	84	91	90-110	7	10	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA-R6/AP-2
Pace Project No.: 92521583

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521583001	**PZ-37 (020921)**				
92521583003	**YAMW-2 (020921)**				
92521583004	**YAMW-4 (020921)**				
92521583005	**YAMW-5 (020921)**				
92521583006	**YAMW-1 (020921)**				
92521583007	**PZ-35(021021)**				
92521583001	**PZ-37 (020921)**	EPA 3005A	600920	EPA 6020B	601040
92521583003	**YAMW-2 (020921)**	EPA 3005A	600920	EPA 6020B	601040
92521583004	**YAMW-4 (020921)**	EPA 3005A	600920	EPA 6020B	601040
92521583005	**YAMW-5 (020921)**	EPA 3005A	600920	EPA 6020B	601040
92521583006	**YAMW-1 (020921)**	EPA 3005A	600920	EPA 6020B	601040
92521583007	**PZ-35(021021)**	EPA 3005A	600920	EPA 6020B	601040
92521583001	**PZ-37 (020921)**	EPA 7470A	600023	EPA 7470A	600226
92521583003	**YAMW-2 (020921)**	EPA 7470A	600023	EPA 7470A	600226
92521583004	**YAMW-4 (020921)**	EPA 7470A	600023	EPA 7470A	600226
92521583005	**YAMW-5 (020921)**	EPA 7470A	600023	EPA 7470A	600226
92521583006	**YAMW-1 (020921)**	EPA 7470A	600023	EPA 7470A	600226
92521583007	**PZ-35(021021)**	EPA 7470A	600023	EPA 7470A	600226
92521583001	**PZ-37 (020921)**	EPA 300.0 Rev 2.1 1993	599664		
92521583003	**YAMW-2 (020921)**	EPA 300.0 Rev 2.1 1993	599664		
92521583004	**YAMW-4 (020921)**	EPA 300.0 Rev 2.1 1993	599664		
92521583005	**YAMW-5 (020921)**	EPA 300.0 Rev 2.1 1993	599664		
92521583006	**YAMW-1 (020921)**	EPA 300.0 Rev 2.1 1993	599664		
92521583007	**PZ-35(021021)**	EPA 300.0 Rev 2.1 1993	599664		

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

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

[illegible]

Client Name: GA Power

Project #: **WO# : 92521583**

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

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

Date/Initials Person Examining Contents: 3/18/21

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: 2.1   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): 2.1

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY   Field Data Required? ☐ Yes ☐ No

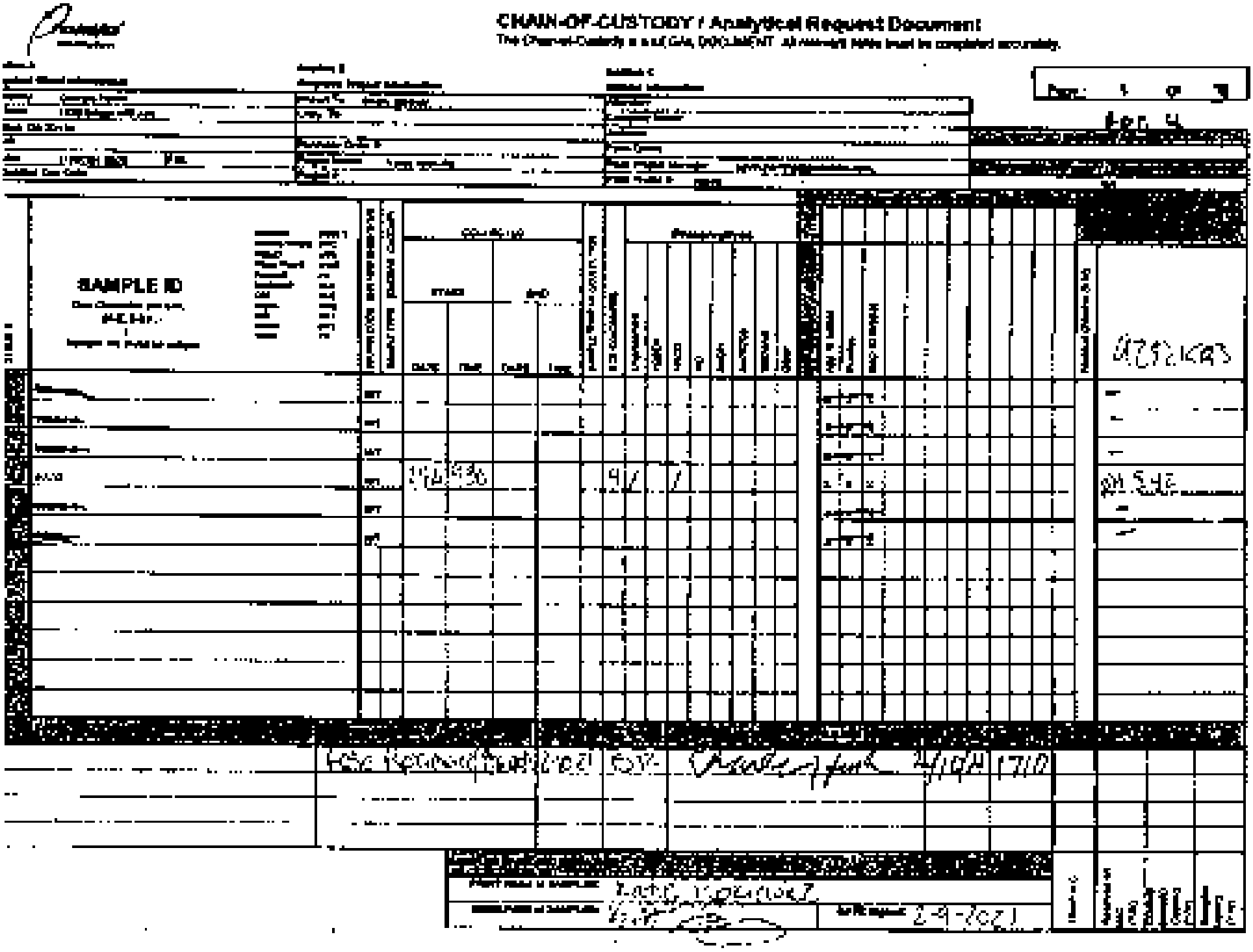
Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ______   Date/Time: ______

Project Manager SCURF Review: ______   Date: ______

Project Manager SRF Review: ______   Date: ______



CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

SAMPLE ID

DATE

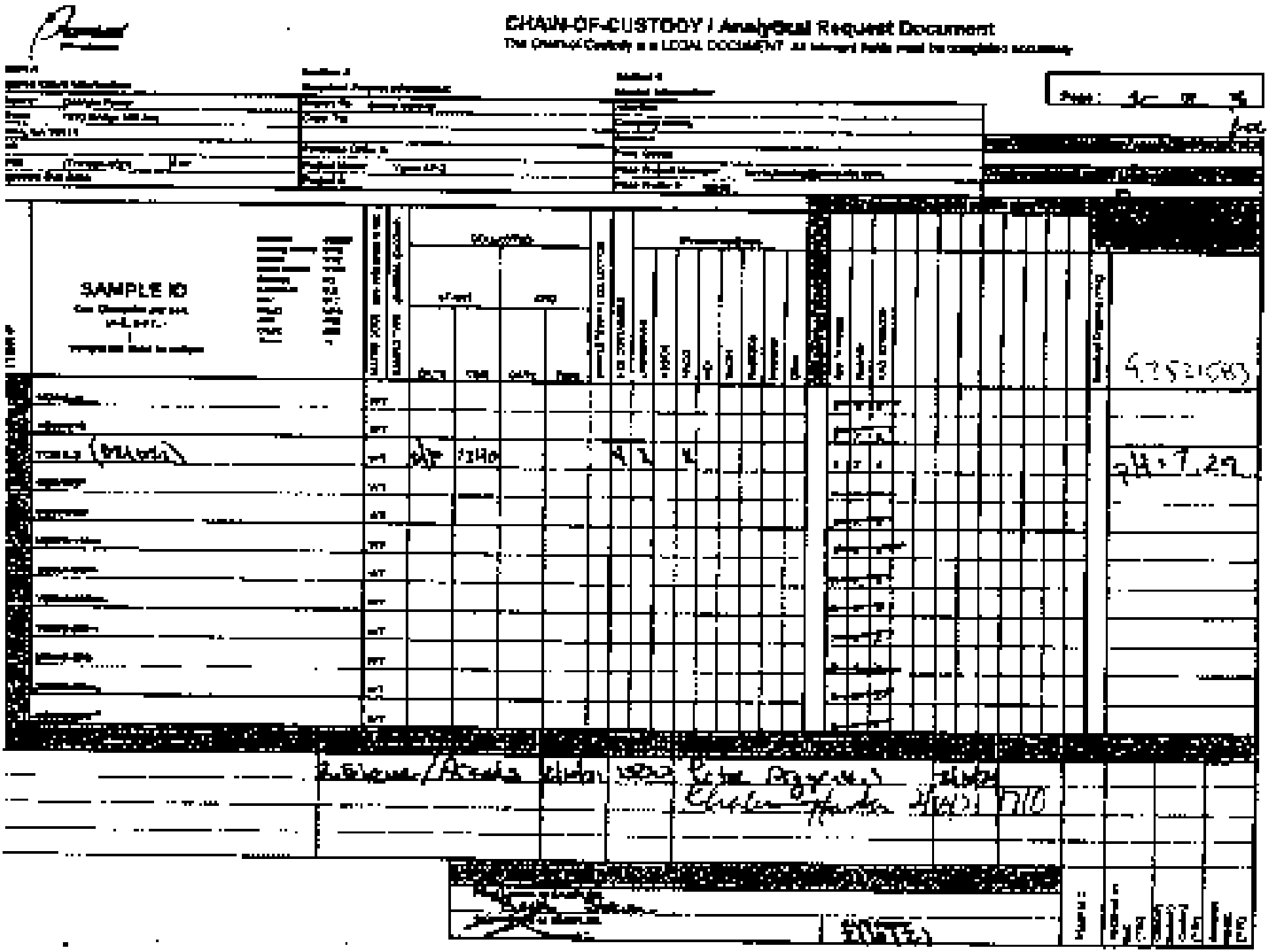
TIME

MATRIX

OF CONTAINERS

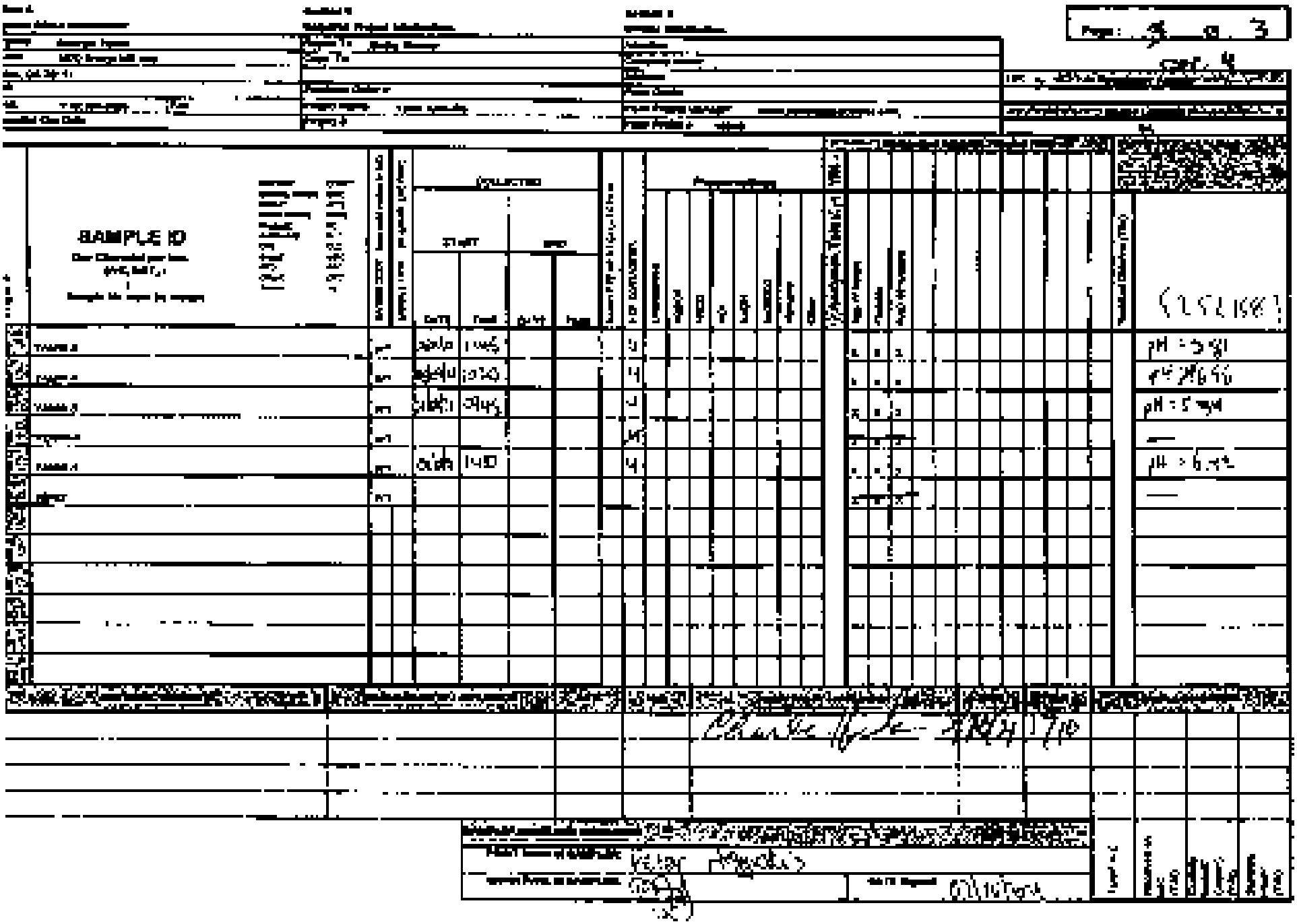
ANALYSIS REQUEST

2-9-2021


CHAIN-OF-CUSTODY / Analytical Request Document
SAMPLE ID

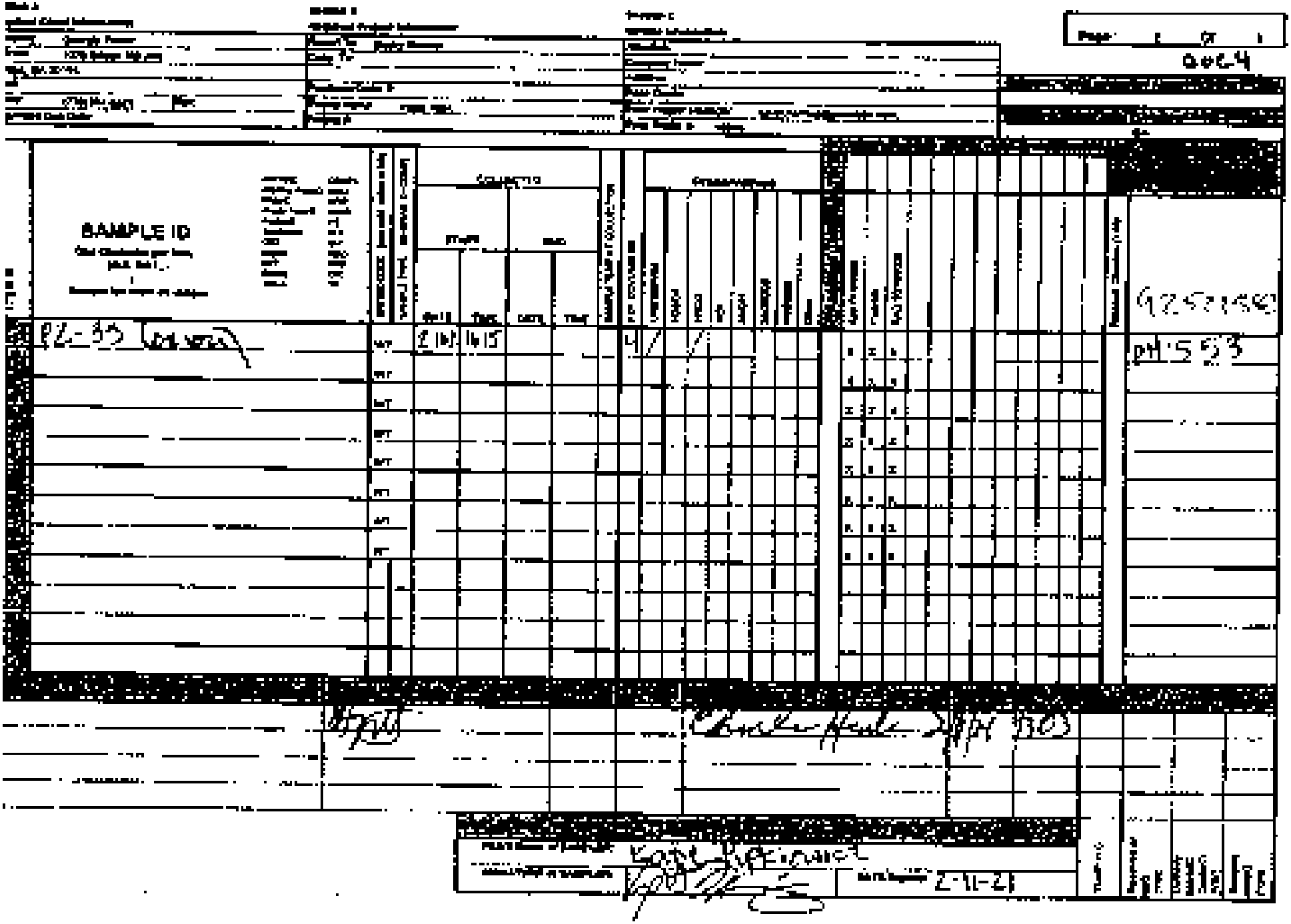
CHAIN-OF-CUSTODY / Analytical Request Document

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



CHAIN-OF-CUSTODY / Analytical Request Document

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



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

March 05, 2021

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

RE: Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 11, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521572001	**PZ-37 (020921)**	Water	02/09/21 09:30	02/10/21 17:10
92521572003	**YAMW-2 (020921)**	Water	02/09/21 12:45	02/10/21 17:10
92521572004	**YAMW-4 (020921)**	Water	02/09/21 10:20	02/10/21 17:10
92521572005	**YAMW-5 (020921)**	Water	02/09/21 09:45	02/10/21 17:10
92521572006	**YAMW-1 (020921)**	Water	02/09/21 14:10	02/10/21 17:10
92521572007	**PZ-35(021021)**	Water	02/10/21 16:15	02/11/21 13:03

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SAMPLE ANALYTE COUNT

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521572001	**PZ-37 (020921)**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521572003	**YAMW-2 (020921)**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521572004	**YAMW-4 (020921)**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521572005	**YAMW-5 (020921)**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521572006	**YAMW-1 (020921)**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521572007	**PZ-35(021021)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521572001	**PZ-37 (020921)**					
EPA 9315	Radium-226	0.561 ± 0.213 (0.207) C:68% T:NA	pCi/L		03/02/21 11:26	
EPA 9320	Radium-228	0.955 ± 0.451 (0.768) C:76% T:88%	pCi/L		02/24/21 15:31	
Total Radium Calculation	Total Radium	1.52 ± 0.664 (0.975)	pCi/L		03/02/21 16:35	
92521572003	**YAMW-2 (020921)**					
EPA 9315	Radium-226	0.112 ± 0.123 (0.249) C:83% T:NA	pCi/L		03/02/21 11:24	
EPA 9320	Radium-228	0.380 ± 0.425 (0.891) C:73% T:84%	pCi/L		02/24/21 15:31	
Total Radium Calculation	Total Radium	0.492 ± 0.548 (1.14)	pCi/L		03/02/21 16:35	
92521572004	**YAMW-4 (020921)**					
EPA 9315	Radium-226	0.186 ± 0.126 (0.202) C:81% T:NA	pCi/L		03/02/21 11:23	
EPA 9320	Radium-228	0.473 ± 0.414 (0.837) C:72% T:86%	pCi/L		02/24/21 15:31	
Total Radium Calculation	Total Radium	0.659 ± 0.540 (1.04)	pCi/L		03/02/21 16:35	
92521572005	**YAMW-5 (020921)**					
EPA 9315	Radium-226	0.405 ± 0.214 (0.350) C:78% T:NA	pCi/L		03/01/21 19:11	
EPA 9320	Radium-228	0.664 ± 0.477 (0.936) C:73% T:84%	pCi/L		02/24/21 15:32	
Total Radium Calculation	Total Radium	1.07 ± 0.691 (1.29)	pCi/L		03/02/21 16:39	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521572006	**YAMW-1 (020921)**					
EPA 9315	Radium-226	0.159 ± 0.136 (0.251) C:76% T:NA	pCi/L		03/02/21 07:34	
EPA 9320	Radium-228	0.707 ± 0.491 (0.957) C:71% T:83%	pCi/L		02/24/21 15:32	
Total Radium Calculation	Total Radium	0.866 ± 0.627 (1.21)	pCi/L		03/02/21 16:39	
92521572007	**PZ-35(021021)**					
EPA 9315	Radium-226	0.0238 ± 0.0799 (0.201) C:92% T:NA	pCi/L		03/05/21 07:14	
EPA 9320	Radium-228	0.522 ± 0.370 (0.721) C:76% T:97%	pCi/L		02/24/21 15:32	
Total Radium Calculation	Total Radium	0.546 ± 0.450 (0.922)	pCi/L		03/05/21 14:01	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Sample: PZ-37 (020921) **Lab ID: 92521572001** Collected: 02/09/21 09:30 Received: 02/10/21 17:10 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	**0.561 ± 0.213 (0.207) C:68% T:NA**	pCi/L	03/02/21 11:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.955 ± 0.451 (0.768) C:76% T:88%**	pCi/L	02/24/21 15:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.52 ± 0.664 (0.975)**	pCi/L	03/02/21 16:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Sample: YAMW-2 (020921) **Lab ID: 92521572003** Collected: 02/09/21 12:45 Received: 02/10/21 17:10 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	**0.112 ± 0.123 (0.249) C:83% T:NA**	pCi/L	03/02/21 11:24	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.380 ± 0.425 (0.891) C:73% T:84%**	pCi/L	02/24/21 15:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.492 ± 0.548 (1.14)**	pCi/L	03/02/21 16:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Sample: YAMW-4 (020921) **Lab ID: 92521572004** Collected: 02/09/21 10:20 Received: 02/10/21 17:10 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	**0.186 ± 0.126 (0.202) C:81% T:NA**	pCi/L	03/02/21 11:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.473 ± 0.414 (0.837) C:72% T:86%**	pCi/L	02/24/21 15:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.659 ± 0.540 (1.04)**	pCi/L	03/02/21 16:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Sample: YAMW-5 (020921) **Lab ID: 92521572005** Collected: 02/09/21 09:45 Received: 02/10/21 17:10 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	**0.405 ± 0.214 (0.350) C:78% T:NA**	pCi/L	03/01/21 19:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.664 ± 0.477 (0.936) C:73% T:84%**	pCi/L	02/24/21 15:32	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.07 ± 0.691 (1.29)**	pCi/L	03/02/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Sample: YAMW-1 (020921) **Lab ID: 92521572006** Collected: 02/09/21 14:10 Received: 02/10/21 17:10 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	**0.159 ± 0.136 (0.251) C:76% T:NA**	pCi/L	03/02/21 07:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.707 ± 0.491 (0.957) C:71% T:83%**	pCi/L	02/24/21 15:32	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.866 ± 0.627 (1.21)**	pCi/L	03/02/21 16:39	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Sample: PZ-35(021021) **Lab ID: 92521572007** Collected: 02/10/21 16:15 Received: 02/11/21 13:03 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	**0.0238 ± 0.0799 (0.201) C:92% T:NA**	pCi/L	03/05/21 07:14	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.522 ± 0.370 (0.721) C:76% T:97%**	pCi/L	02/24/21 15:32	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.546 ± 0.450 (0.922)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

QC Batch: 435459 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521572001, 92521572003, 92521572004, 92521572005, 92521572006

METHOD BLANK: 2102227 Matrix: Water
Associated Lab Samples: 92521572001, 92521572003, 92521572004, 92521572005, 92521572006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.276 ± 0.140 (0.180) C:89% T:NA	pCi/L	03/02/21 07:53	

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: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

QC Batch: 435781
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521572007

METHOD BLANK: 2103737 Matrix: Water
Associated Lab Samples: 92521572007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0349 ± 0.0874 (0.210) C:95% T:NA	pCi/L	03/05/21 07:14	

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: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

QC Batch: 435116 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521572001, 92521572003, 92521572004, 92521572005, 92521572006, 92521572007

METHOD BLANK: 2100680 Matrix: Water
Associated Lab Samples: 92521572001, 92521572003, 92521572004, 92521572005, 92521572006, 92521572007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.356 ± 0.369 (0.763) C:72% T:87%	pCi/L	02/24/21 15:29	

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

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

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.

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: YATES AMA-R6/AP-2 RADS
Pace Project No.: 92521572

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521572001	**PZ-37 (020921)**	EPA 9315	435459		
92521572003	**YAMW-2 (020921)**	EPA 9315	435459		
92521572004	**YAMW-4 (020921)**	EPA 9315	435459		
92521572005	**YAMW-5 (020921)**	EPA 9315	435459		
92521572006	**YAMW-1 (020921)**	EPA 9315	435459		
92521572007	**PZ-35(021021)**	EPA 9315	435781		
92521572001	**PZ-37 (020921)**	EPA 9320	435116		
92521572003	**YAMW-2 (020921)**	EPA 9320	435116		
92521572004	**YAMW-4 (020921)**	EPA 9320	435116		
92521572005	**YAMW-5 (020921)**	EPA 9320	435116		
92521572006	**YAMW-1 (020921)**	EPA 9320	435116		
92521572007	**PZ-35(021021)**	EPA 9320	435116		
92521572001	**PZ-37 (020921)**	Total Radium Calculation	436928		
92521572003	**YAMW-2 (020921)**	Total Radium Calculation	436928		
92521572004	**YAMW-4 (020921)**	Total Radium Calculation	436928		
92521572005	**YAMW-5 (020921)**	Total Radium Calculation	436930		
92521572006	**YAMW-1 (020921)**	Total Radium Calculation	436930		
92521572007	**PZ-35(021021)**	Total Radium Calculation	437456		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: October 3rd, 2019 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

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

[redacted] Client Name:

Project #: WO# : 92521572

Courier:
☐ Commercial ☐ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Other

Custody Seal Present: ☐ Yes ☐ No Seals Intact: ☐ Yes ☐ No

Cooler Temperature Recording Device: IR Gun

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

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

Thermometer: ☐ IR Gun 2.3V Type of Ice: ☐ Wet ☐ Blue ☐ Dry

Cooler Type: Cl Corrected (°C): 0.0

Cooler Temp Corrected (°C): 2.3

Temp should be above freezing to 6°C

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

All Containers Needing Preservation have been Checked? Initial when completed: W

Headspace in VOA Vials (>6mm)? ☐ Yes ☐ No ☐ N/A 10

Trip Blank Present? ☐ Yes ☐ No ☐ N/A 11

Trip Blank Custody Seals Present? ☐ Yes ☐ No ☐ N/A

Comments/Discrepancy:

Pace Trip Blank Lot # (if purchased):

Client Notification/Resolution:

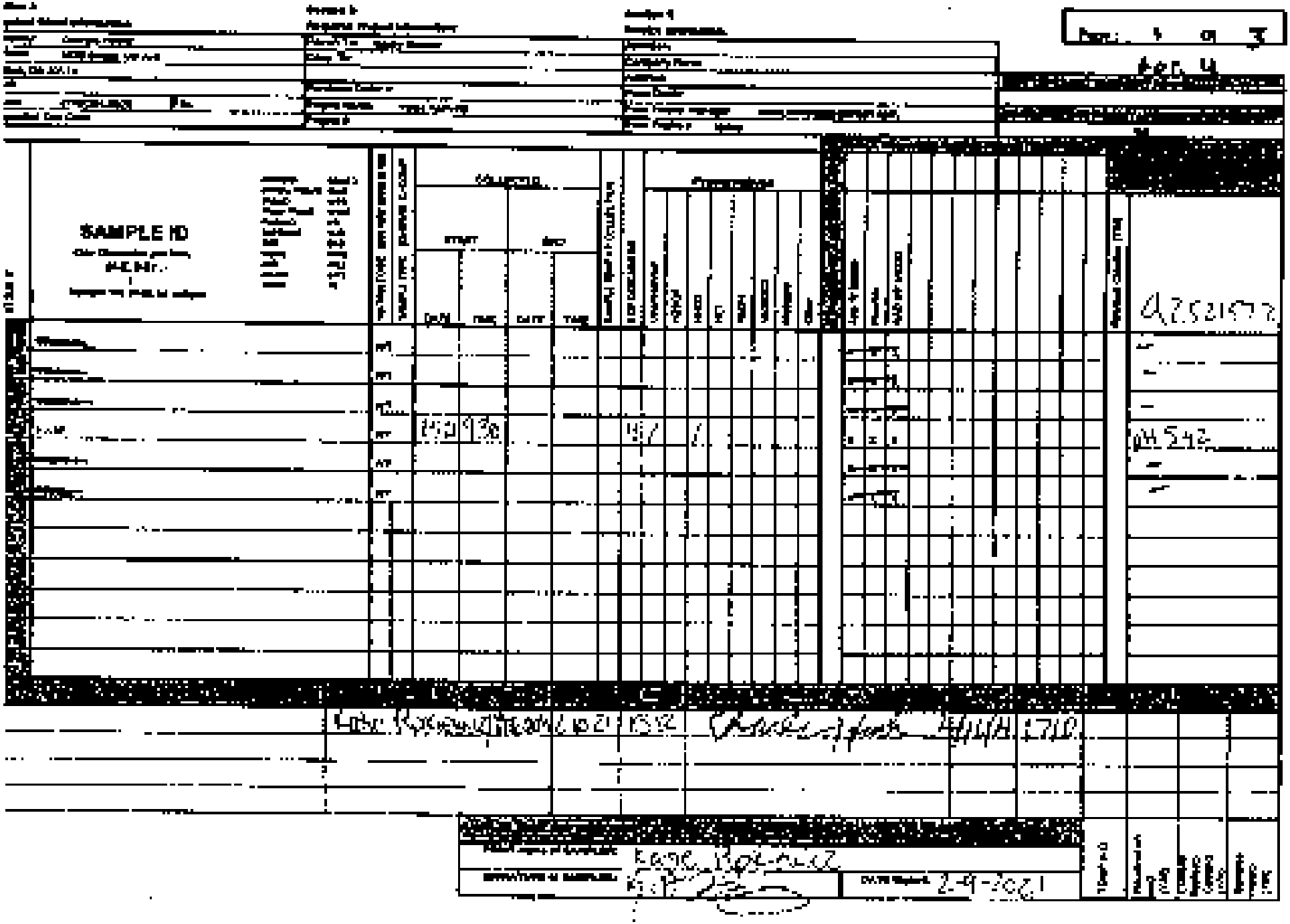
Person Contacted: Date/Time:

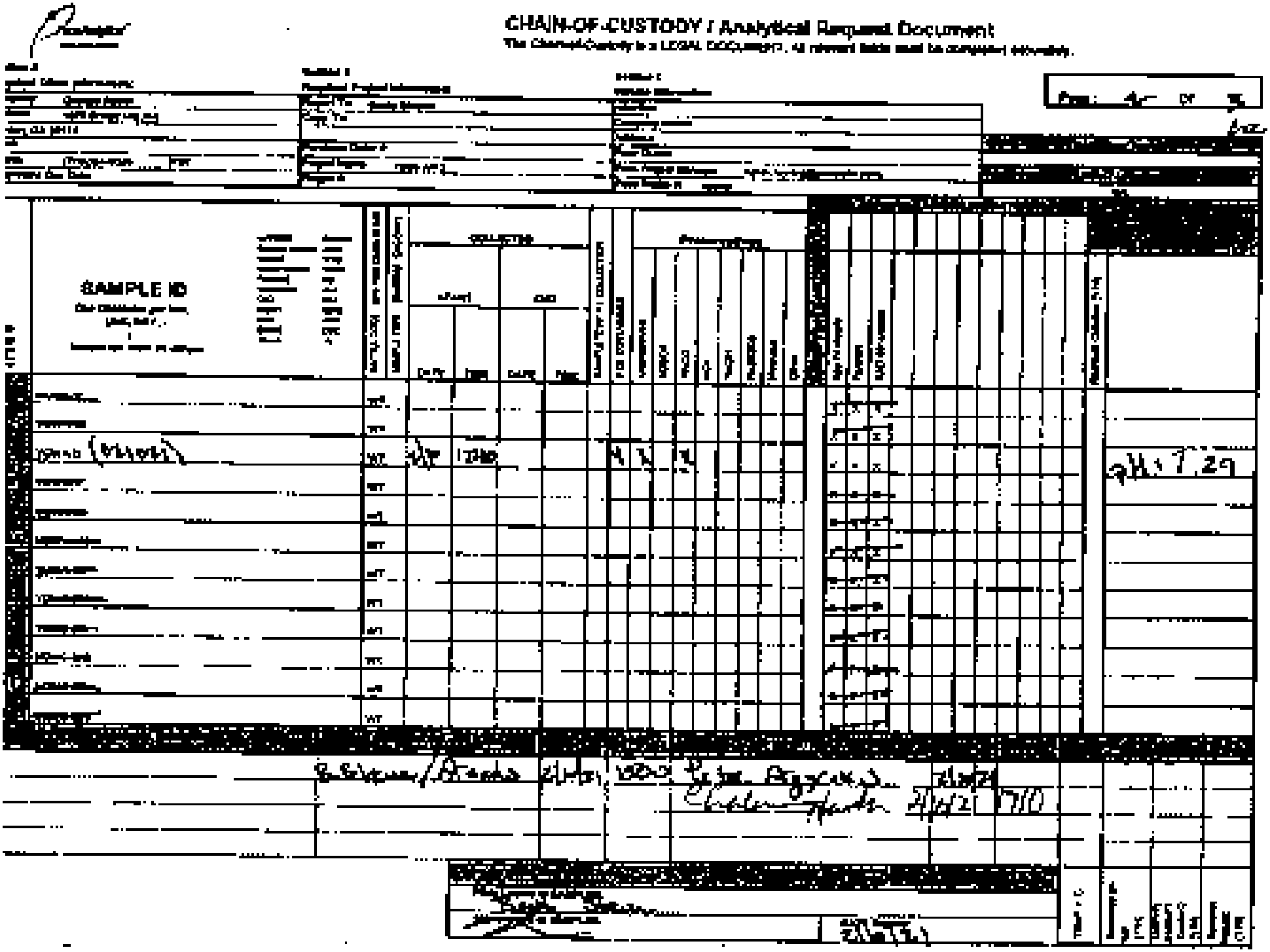
Project Manager SCURF Reviewer: Date:

Project Manager SRF Reviewer: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

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





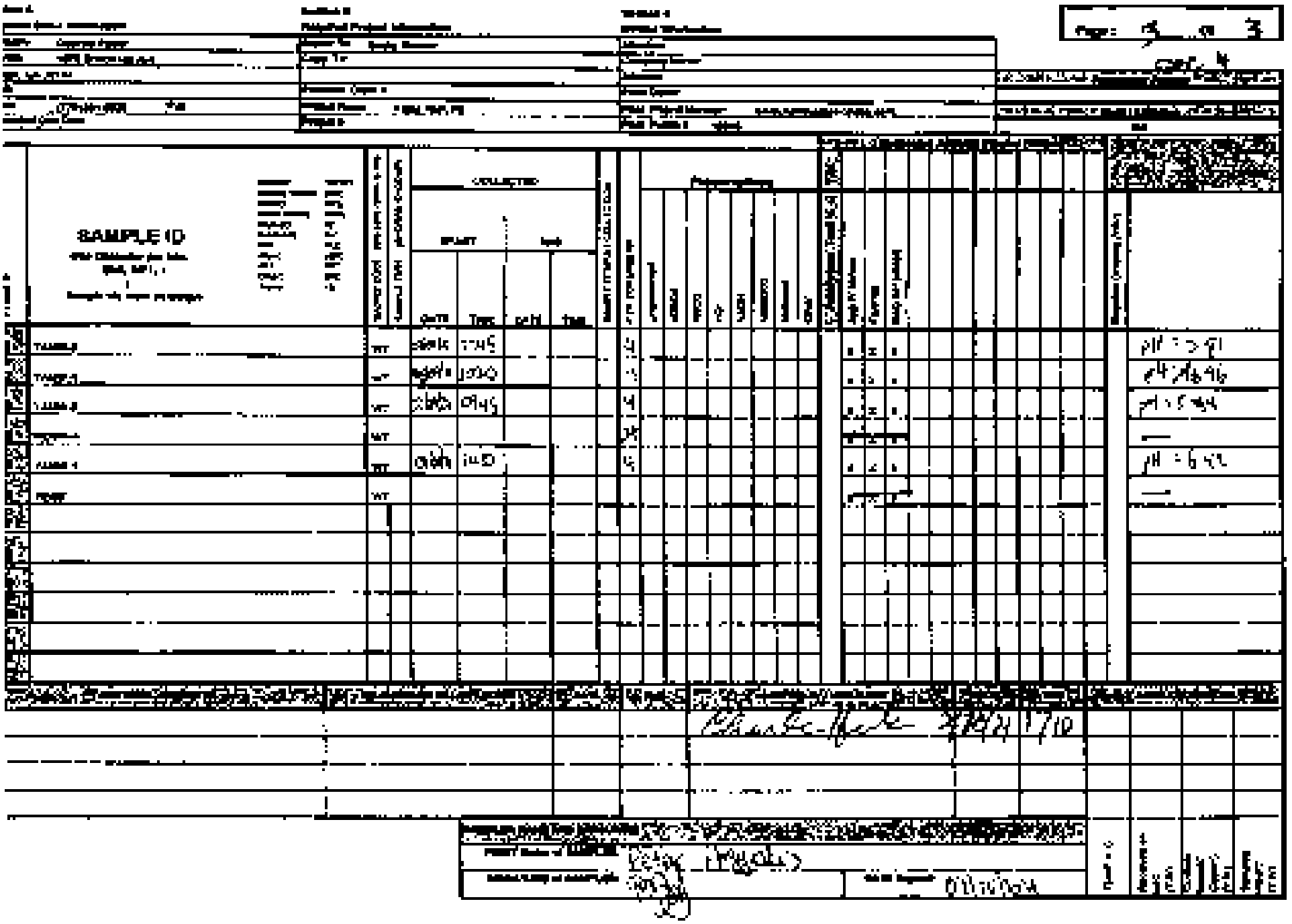
CHAIN-OF-CUSTODY / Analytical Request Document

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

SAMPLE ID

CHAIN-OF-CUSTODY / Analytical Request Document

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



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

SAMPLE ID

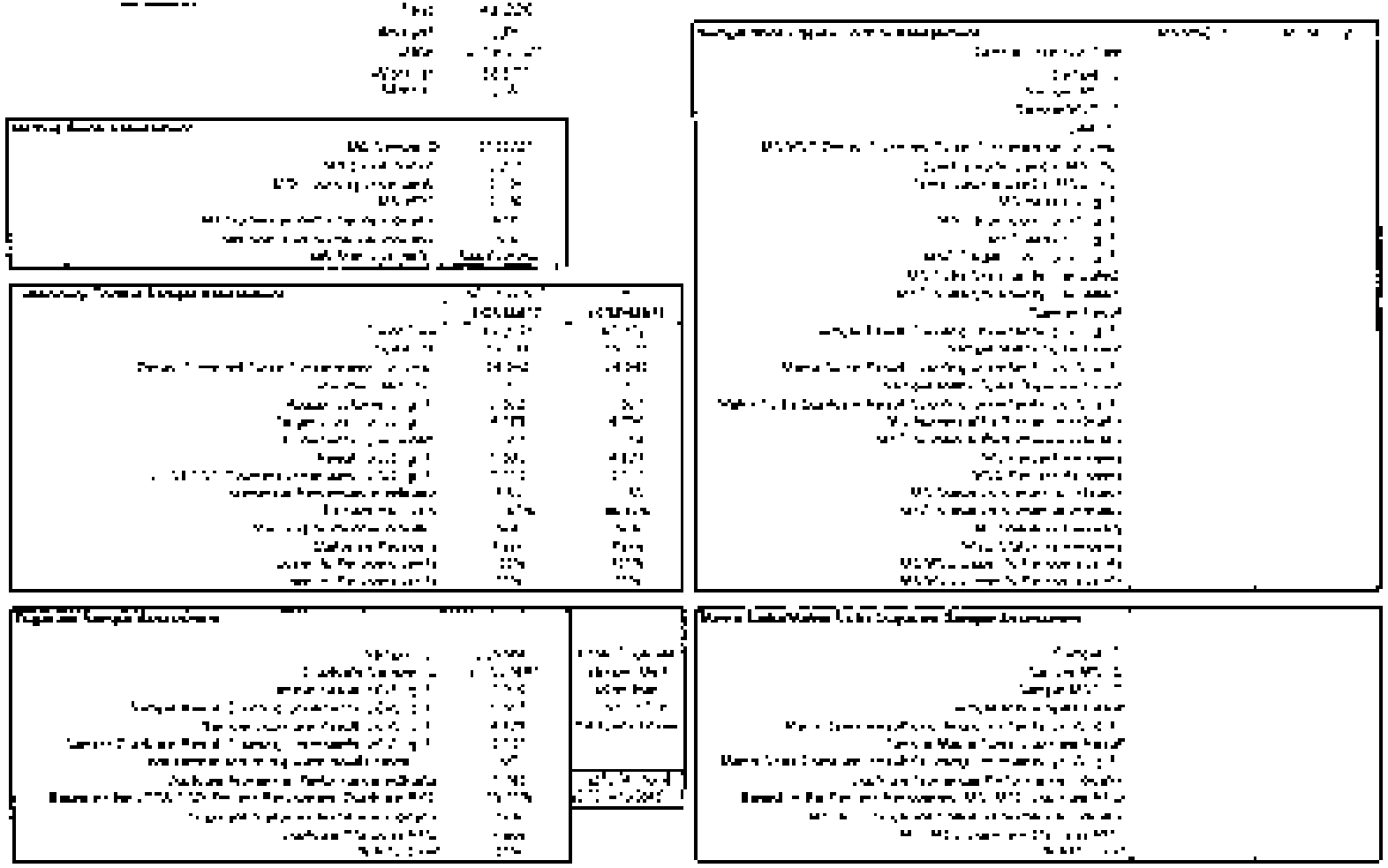
SAMPLE ID	Collected Date/Time	# of Containers	Residual Chlorine / Notes
12-33 [illegible]	[illegible] 1105	4	pH 5.53

Relinquished: Clark Hale 2/11 1503

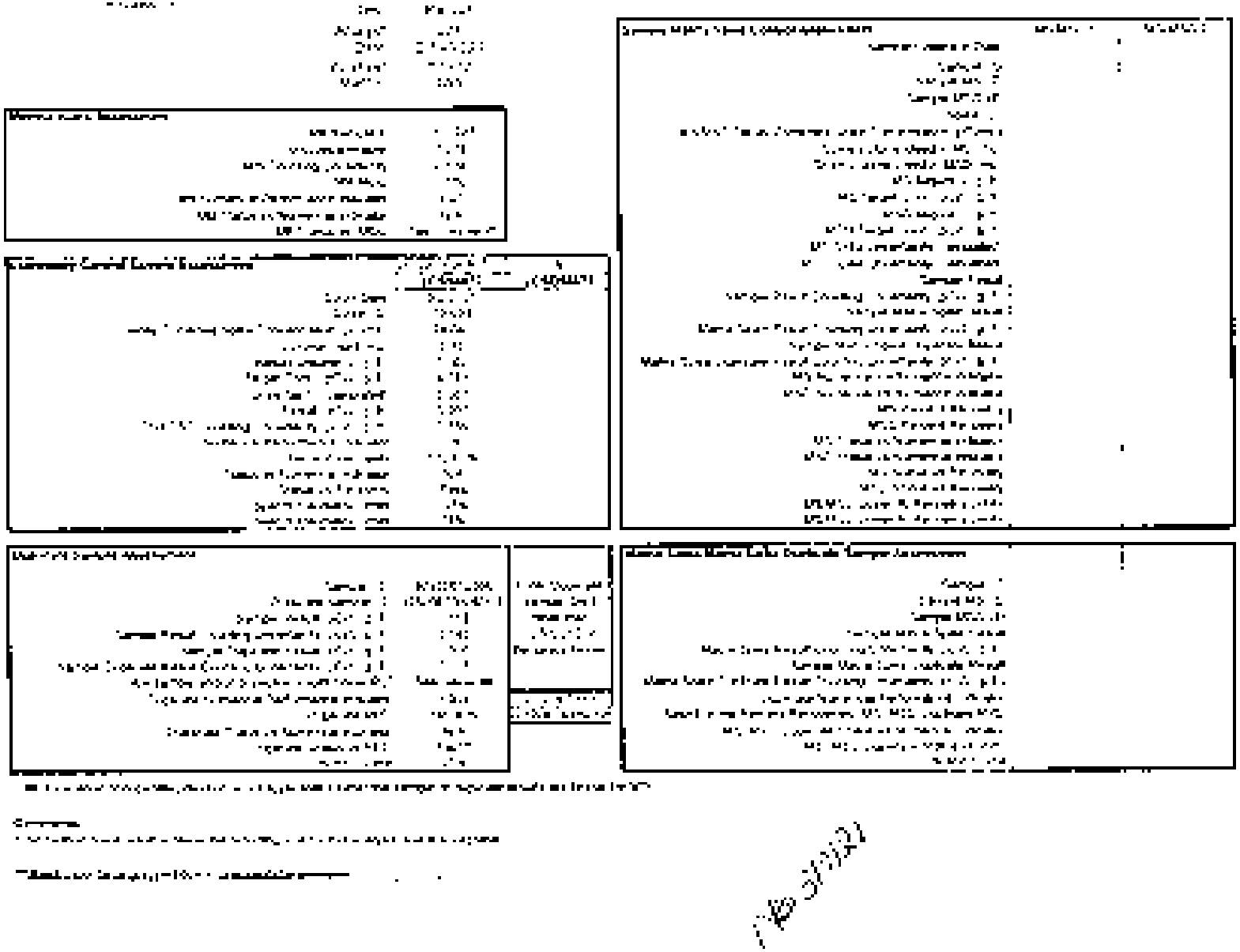
Print Name of Sampler: [illegible]

Date Signed: 2-11-21

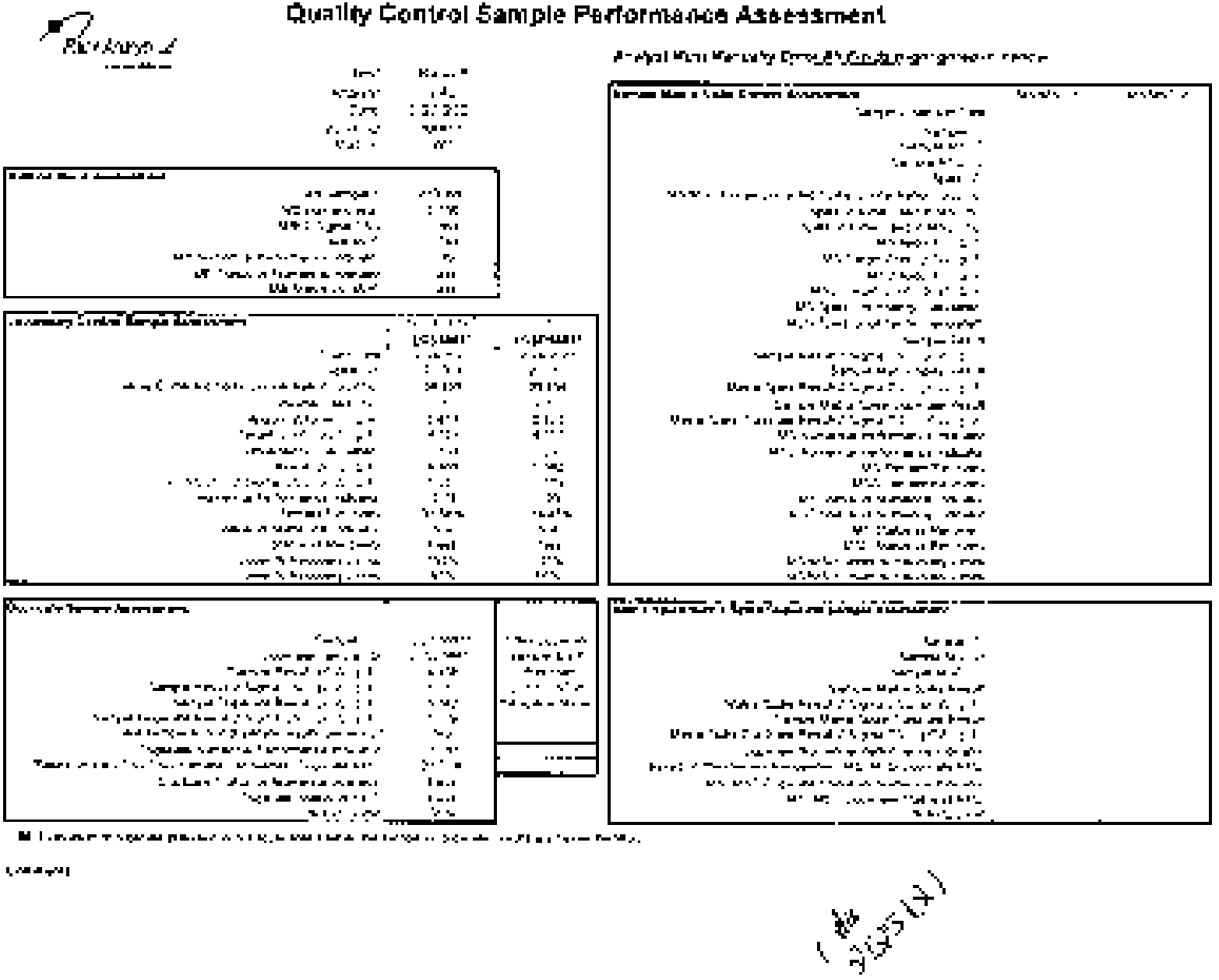
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



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

March 19, 2021

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

RE: Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on February 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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

Enclosures

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

Pace Analytical Services, LLC
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CERTIFICATIONS

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SAMPLE SUMMARY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521564001	**YGWC-38 (020921)**	Water	02/09/21 13:50	02/10/21 17:10
92521564002	**YGWC-41 (021021)**	Water	02/10/21 13:25	02/10/21 17:10
92521564003	**YGWC-42 (021021)**	Water	02/10/21 14:30	02/10/21 17:10
92521564004	**YGWC-43 (020921)**	Water	02/09/21 15:30	02/10/21 17:10
92521564005	**EB-01(021021)**	Water	02/10/21 13:30	02/10/21 17:10
92521564006	**YGWC-23S (020921)**	Water	02/09/21 11:10	02/10/21 17:10
92521564007	**YGWC-49 (020921)**	Water	02/09/21 15:15	02/10/21 17:10
92521564008	**YGWC-24SA (020921)**	Water	02/09/21 16:10	02/10/21 17:10
92521564009	**DUP-02 (020921)**	Water	02/09/21 00:00	02/10/21 17:10
92521564010	**YGWC-36A (021021)**	Water	02/10/21 14:30	02/10/21 17:10
92521564011	**YGWC-38 (020921) MS**	Water	02/09/21 13:50	02/10/21 17:10
92521564012	**YGWC-38 (020921) MSD**	Water	02/09/21 13:50	02/10/21 17:10

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(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521564001	**YGWC-38 (020921)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521564002	**YGWC-41 (021021)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521564003	**YGWC-42 (021021)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521564004	**YGWC-43 (020921)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521564005	**EB-01(021021)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521564006	**YGWC-23S (020921)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521564007	**YGWC-49 (020921)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521564008	**YGWC-24SA (020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521564009	**DUP-02 (020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521564010	**YGWC-36A (021021)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521564011	**YGWC-38 (020921) MS**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92521564012	**YGWC-38 (020921) MSD**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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

SUMMARY OF DETECTION

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521564001	**YGWC-38 (020921)**					
EPA 9315	Radium-226	0.302 ± 0.160 (0.232) C:89% T:NA	pCi/L		03/05/21 07:44	
EPA 9320	Radium-228	0.320 ± 0.348 (0.724) C:80% T:82%	pCi/L		02/26/21 14:46	
Total Radium Calculation	Total Radium	0.626 ± 0.580 (1.07)	pCi/L		03/05/21 14:01	
92521564002	**YGWC-41 (021021)**					
EPA 9315	Radium-226	0.124 ± 0.136 (0.280) C:87% T:NA	pCi/L		03/05/21 07:44	
EPA 9320	Radium-228	0.424 ± 0.338 (0.664) C:76% T:88%	pCi/L		02/26/21 14:46	
Total Radium Calculation	Total Radium	0.548 ± 0.474 (0.944)	pCi/L		03/05/21 14:01	
92521564003	**YGWC-42 (021021)**					
EPA 9315	Radium-226	0.259 ± 0.201 (0.383) C:79% T:NA	pCi/L		03/05/21 07:44	
EPA 9320	Radium-228	0.353 ± 0.350 (0.718) C:75% T:85%	pCi/L		02/26/21 14:46	
Total Radium Calculation	Total Radium	0.612 ± 0.551 (1.10)	pCi/L		03/05/21 14:01	
92521564004	**YGWC-43 (020921)**					
EPA 9315	Radium-226	4.91 ± 0.852 (0.170) C:88% T:NA	pCi/L		03/18/21 10:30	
EPA 9320	Radium-228	1.47 ± 0.584 (0.904) C:73% T:74%	pCi/L		02/26/21 14:46	
Total Radium Calculation	Total Radium	6.38 ± 1.44 (1.07)	pCi/L		03/18/21 14:07	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521564005	**EB-01(021021)**					
EPA 9315	Radium-226	0.0250 ± 0.103 (0.259) C:88% T:NA	pCi/L		03/05/21 07:45	
EPA 9320	Radium-228	0.699 ± 0.416 (0.774) C:77% T:86%	pCi/L		02/26/21 14:46	
Total Radium Calculation	Total Radium	0.724 ± 0.519 (1.03)	pCi/L		03/05/21 14:01	
92521564006	**YGWC-23S (020921)**					
EPA 9315	Radium-226	0.0999 ± 0.121 (0.250) C:78% T:NA	pCi/L		03/05/21 07:38	
EPA 9320	Radium-228	0.364 ± 0.363 (0.747) C:76% T:82%	pCi/L		02/26/21 14:46	
Total Radium Calculation	Total Radium	0.464 ± 0.484 (0.997)	pCi/L		03/05/21 14:01	
92521564007	**YGWC-49 (020921)**					
EPA 9315	Radium-226	0.137 ± 0.130 (0.248) C:77% T:NA	pCi/L		03/05/21 07:38	
EPA 9320	Radium-228	-0.0900 ± 0.330 (0.796) C:78% T:76%	pCi/L		02/26/21 14:46	
Total Radium Calculation	Total Radium	0.137 ± 0.460 (1.04)	pCi/L		03/05/21 14:01	
92521564008	**YGWC-24SA (020921)**					
EPA 9315	Radium-226	0.100 ± 0.114 (0.235) C:90% T:NA	pCi/L		03/08/21 08:35	
EPA 9320	Radium-228	0.578 ± 0.379 (0.729) C:80% T:84%	pCi/L		03/02/21 12:34	
Total Radium Calculation	Total Radium	0.678 ± 0.493 (0.964)	pCi/L		03/08/21 12:26	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521564009	**DUP-02 (020921)**					
EPA 9315	Radium-226	0.153 ± 0.130 (0.241) C:86% T:NA	pCi/L		03/08/21 08:35	
EPA 9320	Radium-228	0.310 ± 0.321 (0.666) C:82% T:89%	pCi/L		03/02/21 12:34	
Total Radium Calculation	Total Radium	0.463 ± 0.451 (0.907)	pCi/L		03/08/21 12:26	
92521564010	**YGWC-36A (021021)**					
EPA 9315	Radium-226	0.0504 ± 0.0936 (0.214) C:80% T:NA	pCi/L		03/08/21 08:32	
EPA 9320	Radium-228	0.416 ± 0.429 (0.893) C:73% T:85%	pCi/L		03/02/21 15:44	
Total Radium Calculation	Total Radium	0.466 ± 0.523 (1.11)	pCi/L		03/08/21 12:26	
92521564011	**YGWC-38 (020921) MS**					
EPA 9315	Radium-226	95.48 %REC ± NA (NA) C:NA T:NA	pCi/L		03/05/21 07:38	
EPA 9320	Radium-228	101.32 %REC ± NA (NA) C:NA T:NA	pCi/L		02/26/21 14:46	
92521564012	**YGWC-38 (020921) MSD**					
EPA 9315	Radium-226	100.39 %REC 5.01RPD ± NA (NA) C:NA T:NA	pCi/L		03/05/21 07:38	
EPA 9320	Radium-228	92.73 %REC 8.85 RPD ± NA (NA) C:NA T:NA	pCi/L		02/26/21 14:46	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-38 (020921) **Lab ID: 92521564001** Collected: 02/09/21 13:50 Received: 02/10/21 17:10 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	**0.302 ± 0.160 (0.232) C:89% T:NA**	pCi/L	03/05/21 07:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.320 ± 0.348 (0.724) C:80% T:82%**	pCi/L	02/26/21 14:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.626 ± 0.580 (1.07)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-41 (021021) **Lab ID: 92521564002** Collected: 02/10/21 13:25 Received: 02/10/21 17:10 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	**0.124 ± 0.136 (0.280) C:87% T:NA**	pCi/L	03/05/21 07:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.424 ± 0.338 (0.664) C:76% T:88%**	pCi/L	02/26/21 14:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.548 ± 0.474 (0.944)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-42 (021021) **Lab ID: 92521564003** Collected: 02/10/21 14:30 Received: 02/10/21 17:10 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	**0.259 ± 0.201 (0.383) C:79% T:NA**	pCi/L	03/05/21 07:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.353 ± 0.350 (0.718) C:75% T:85%**	pCi/L	02/26/21 14:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.612 ± 0.551 (1.10)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-43 (020921) **Lab ID: 92521564004** Collected: 02/09/21 15:30 Received: 02/10/21 17:10 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	**4.91 ± 0.852 (0.170) C:88% T:NA**	pCi/L	03/18/21 10:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.47 ± 0.584 (0.904) C:73% T:74%**	pCi/L	02/26/21 14:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**6.38 ± 1.44 (1.07)**	pCi/L	03/18/21 14:07	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: EB-01(021021) **Lab ID: 92521564005** Collected: 02/10/21 13:30 Received: 02/10/21 17:10 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	**0.0250 ± 0.103 (0.259) C:88% T:NA**	pCi/L	03/05/21 07:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.699 ± 0.416 (0.774) C:77% T:86%**	pCi/L	02/26/21 14:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.724 ± 0.519 (1.03)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-23S (020921) **Lab ID: 92521564006** Collected: 02/09/21 11:10 Received: 02/10/21 17:10 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	**0.0999 ± 0.121 (0.250) C:78% T:NA**	pCi/L	03/05/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.364 ± 0.363 (0.747) C:76% T:82%**	pCi/L	02/26/21 14:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.464 ± 0.484 (0.997)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-49 (020921) **Lab ID: 92521564007** Collected: 02/09/21 15:15 Received: 02/10/21 17:10 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	**0.137 ± 0.130 (0.248) C:77% T:NA**	pCi/L	03/05/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0900 ± 0.330 (0.796) C:78% T:76%**	pCi/L	02/26/21 14:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.137 ± 0.460 (1.04)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-24SA (020921) **Lab ID: 92521564008** Collected: 02/09/21 16:10 Received: 02/10/21 17:10 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	**0.100 ± 0.114 (0.235) C:90% T:NA**	pCi/L	03/08/21 08:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.578 ± 0.379 (0.729) C:80% T:84%**	pCi/L	03/02/21 12:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.678 ± 0.493 (0.964)**	pCi/L	03/08/21 12:26	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: DUP-02 (020921) **Lab ID: 92521564009** Collected: 02/09/21 00:00 Received: 02/10/21 17:10 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	**0.153 ± 0.130 (0.241) C:86% T:NA**	pCi/L	03/08/21 08:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.310 ± 0.321 (0.666) C:82% T:89%**	pCi/L	03/02/21 12:34	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.463 ± 0.451 (0.907)**	pCi/L	03/08/21 12:26	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-36A (021021) **Lab ID: 92521564010** Collected: 02/10/21 14:30 Received: 02/10/21 17:10 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	**0.0504 ± 0.0936 (0.214) C:80% T:NA**	pCi/L	03/08/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.416 ± 0.429 (0.893) C:73% T:85%**	pCi/L	03/02/21 15:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.466 ± 0.523 (1.11)**	pCi/L	03/08/21 12:26	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-38 (020921) MS **Lab ID: 92521564011** Collected: 02/09/21 13:50 Received: 02/10/21 17:10 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	**95.48 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/05/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**101.32 %REC ± NA (NA) C:NA T:NA**	pCi/L	02/26/21 14:46	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Sample: YGWC-38 (020921) MSD **Lab ID: 92521564012** Collected: 02/09/21 13:50 Received: 02/10/21 17:10 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	**100.39 %REC 5.01RPD ± NA (NA) C:NA T:NA**	pCi/L	03/05/21 07:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**92.73 %REC 8.85 RPD ± NA (NA) C:NA T:NA**	pCi/L	02/26/21 14:46	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

QC Batch: 435783 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521564001, 92521564002, 92521564003, 92521564004, 92521564005, 92521564006, 92521564007, 92521564011, 92521564012

METHOD BLANK: 2103740 Matrix: Water
Associated Lab Samples: 92521564001, 92521564002, 92521564003, 92521564004, 92521564005, 92521564006, 92521564007, 92521564011, 92521564012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.267 ± 0.143 (0.193) C:92% T:NA	pCi/L	03/05/21 07:29	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

QC Batch: 435786
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521564008, 92521564009, 92521564010

METHOD BLANK: 2103744 Matrix: Water
Associated Lab Samples: 92521564008, 92521564009, 92521564010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0425 ± 0.0687 (0.225) C:93% T:NA	pCi/L	03/08/21 08:35	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

QC Batch: 435787
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521564008, 92521564009, 92521564010

METHOD BLANK: 2103745 Matrix: Water
Associated Lab Samples: 92521564008, 92521564009, 92521564010

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.345 ± 0.339 (0.700) C:84% T:79%	pCi/L	03/02/21 12:33	

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

QC Batch: 435784 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521564001, 92521564002, 92521564003, 92521564004, 92521564005, 92521564006, 92521564007, 92521564011, 92521564012

METHOD BLANK: 2103741 Matrix: Water
Associated Lab Samples: 92521564001, 92521564002, 92521564003, 92521564004, 92521564005, 92521564006, 92521564007, 92521564011, 92521564012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.191 ± 0.338 (0.740) C:71% T:85%	pCi/L	02/26/21 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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

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.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES R6/AMA RADS
Pace Project No.: 92521564

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521564001	**YGWC-38 (020921)**	EPA 9315	435783		
92521564002	**YGWC-41 (021021)**	EPA 9315	435783		
92521564003	**YGWC-42 (021021)**	EPA 9315	435783		
92521564004	**YGWC-43 (020921)**	EPA 9315	435783		
92521564005	**EB-01(021021)**	EPA 9315	435783		
92521564006	**YGWC-23S (020921)**	EPA 9315	435783		
92521564007	**YGWC-49 (020921)**	EPA 9315	435783		
92521564008	**YGWC-24SA (020921)**	EPA 9315	435786		
92521564009	**DUP-02 (020921)**	EPA 9315	435786		
92521564010	**YGWC-36A (021021)**	EPA 9315	435786		
92521564011	**YGWC-38 (020921) MS**	EPA 9315	435783		
92521564012	**YGWC-38 (020921) MSD**	EPA 9315	435783		
92521564001	**YGWC-38 (020921)**	EPA 9320	435784		
92521564002	**YGWC-41 (021021)**	EPA 9320	435784		
92521564003	**YGWC-42 (021021)**	EPA 9320	435784		
92521564004	**YGWC-43 (020921)**	EPA 9320	435784		
92521564005	**EB-01(021021)**	EPA 9320	435784		
92521564006	**YGWC-23S (020921)**	EPA 9320	435784		
92521564007	**YGWC-49 (020921)**	EPA 9320	435784		
92521564008	**YGWC-24SA (020921)**	EPA 9320	435787		
92521564009	**DUP-02 (020921)**	EPA 9320	435787		
92521564010	**YGWC-36A (021021)**	EPA 9320	435787		
92521564011	**YGWC-38 (020921) MS**	EPA 9320	435784		
92521564012	**YGWC-38 (020921) MSD**	EPA 9320	435784		
92521564001	**YGWC-38 (020921)**	Total Radium Calculation	437456		
92521564002	**YGWC-41 (021021)**	Total Radium Calculation	437456		
92521564003	**YGWC-42 (021021)**	Total Radium Calculation	437456		
92521564004	**YGWC-43 (020921)**	Total Radium Calculation	439388		
92521564005	**EB-01(021021)**	Total Radium Calculation	437456		
92521564006	**YGWC-23S (020921)**	Total Radium Calculation	437456		
92521564007	**YGWC-49 (020921)**	Total Radium Calculation	437456		
92521564008	**YGWC-24SA (020921)**	Total Radium Calculation	437634		
92521564009	**DUP-02 (020921)**	Total Radium Calculation	437634		
92521564010	**YGWC-36A (021021)**	Total Radium Calculation	437634		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 15, 2007
	Document No.: F-GAS-CS-0 Rev 01	Issuing Authority: Pace Corporate Quality Office

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

Client Name: GTI Energy

Project #: WO#: 92521564

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

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

Date/Time Person Receiving Contents: 2/18/14

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

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

Thermometer: ☐ IR Gun # 230 Type of Ice: ☑ Wet ☐ Blue ☐ Dry ☐ None

Cooler Temp: 2.1 Correction Factor: +0.0

Temp should be above freezing to 6°C ☐ Samples out of temp criteria but received on ice, acceptable per client

Cooler Temp Corrected (°C): 2.1

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 (regardless of weight)? ☐ 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				
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	11.

COMMENTS/RESOLUTION

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

Project Manager Review:

Person Contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 3

SAMPLE ID

SAMPLE ID	Collected Date	Collected Time	# of Containers	Comments
ER 01(W2102?)	2/10/21	1530	4	
YGWC-23S	2/5/21	910	4	pH 5.01
	2/10/21	1350	4	pH 5.01
	2/10/21	1025	4	pH 4.98
	2/10/21	1450	4	pH 5.05
	2/5/21	1630	4	pH 7.80

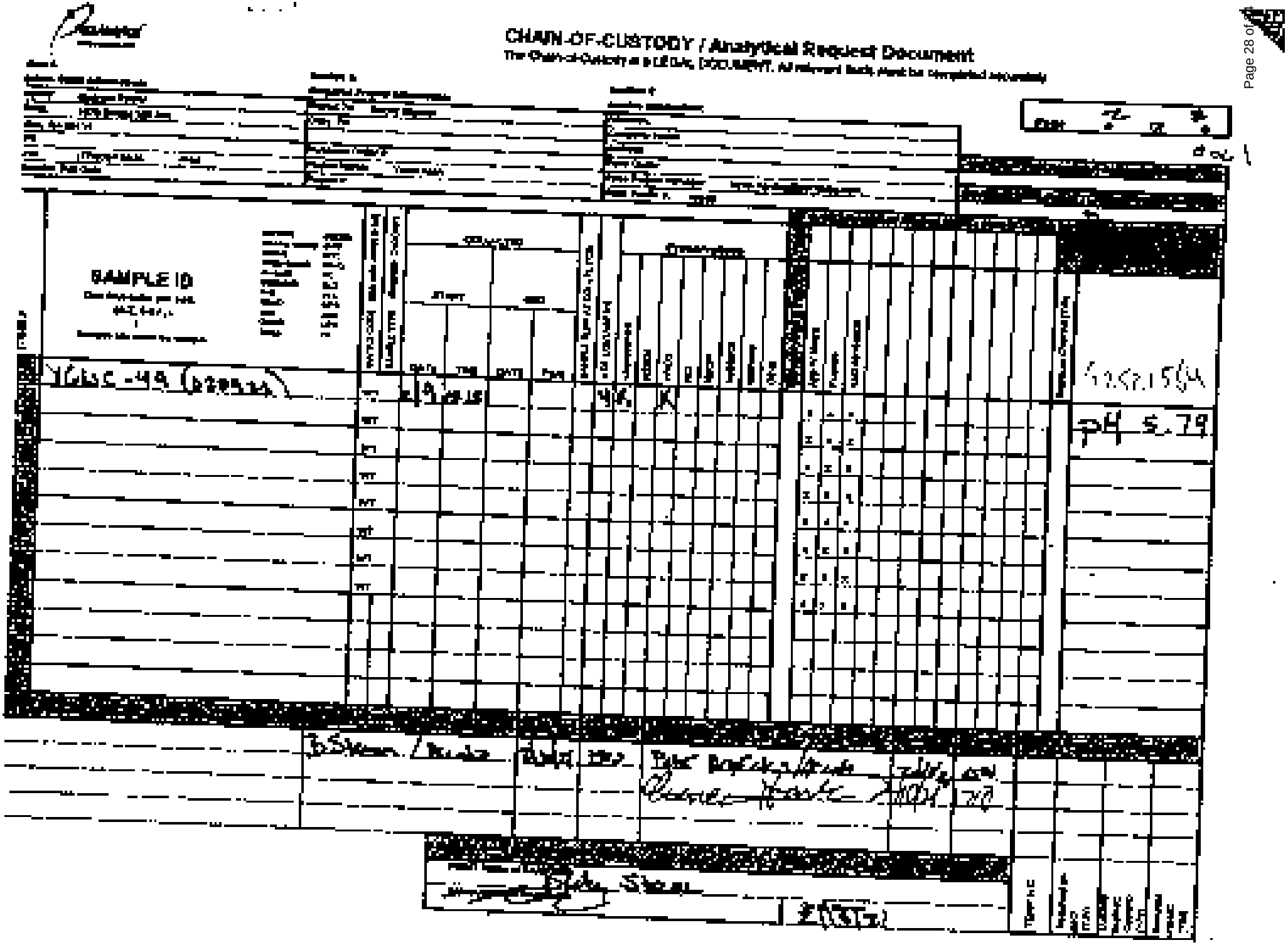
Relinquished by: Kate Kovacz 2/10/21 1512 — Accepted by: Charles Rad... CHAN-IHR

Print Name of Sampler: Catherine Spencer

Date Signed: 2/10/2021

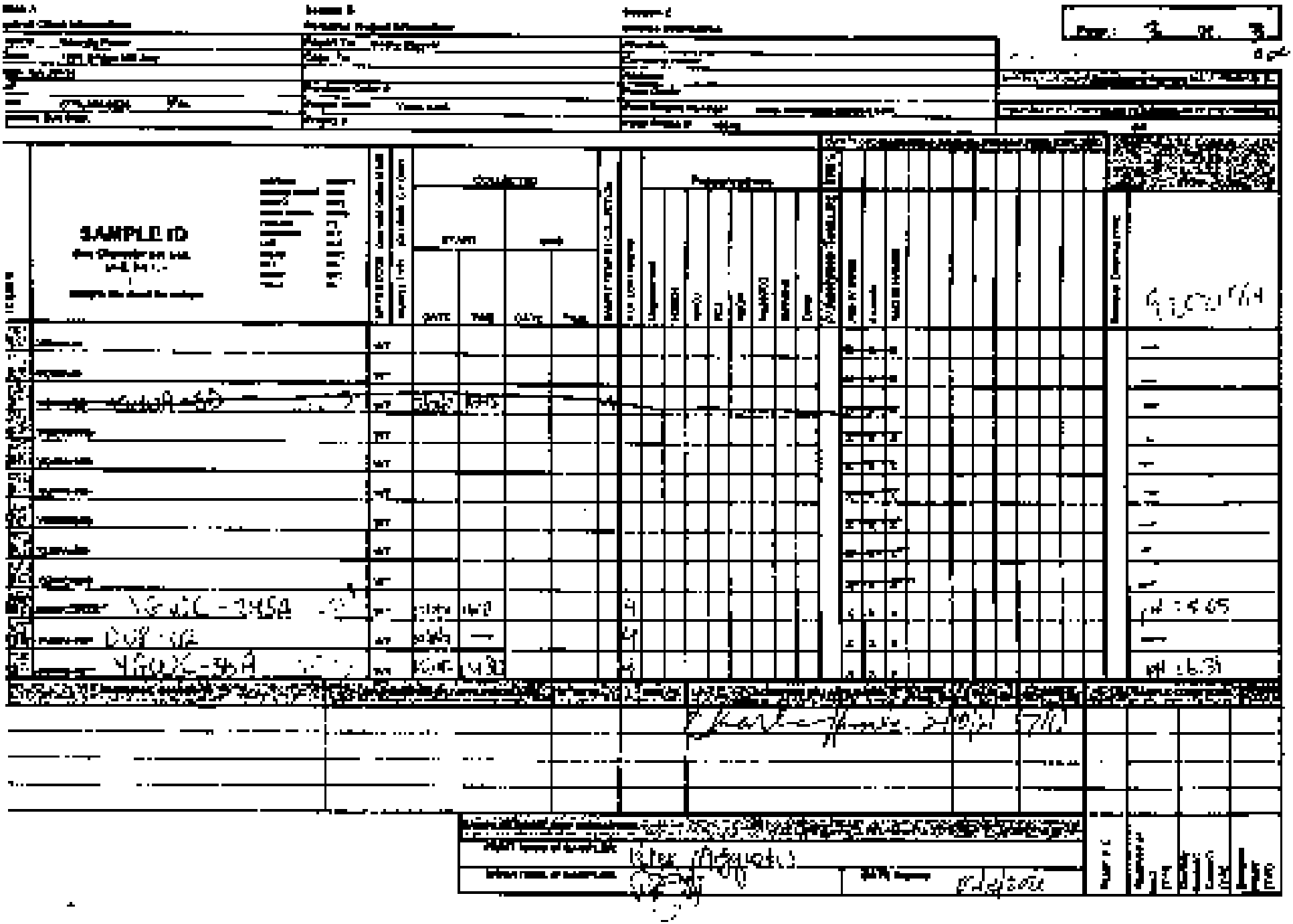
CHAIN-OF-CUSTODY / Analytical Request Document

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



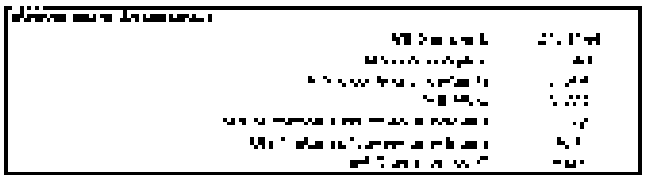
CHAIN-OF-CUSTODY / Analytical Request Document

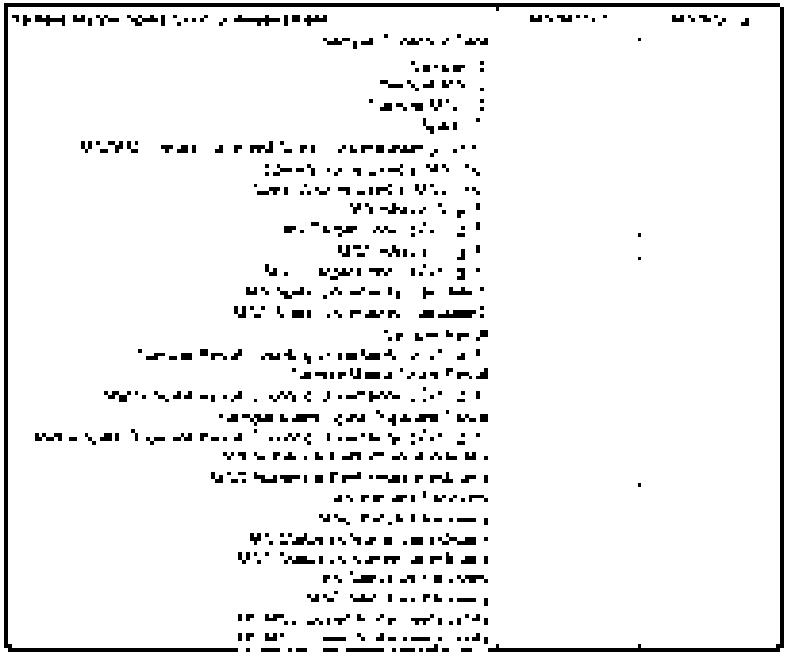
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

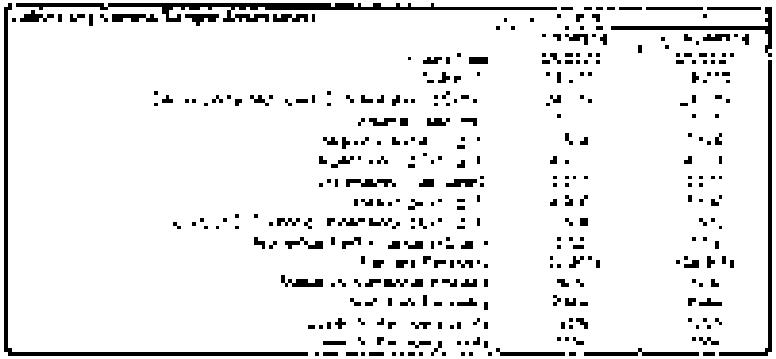


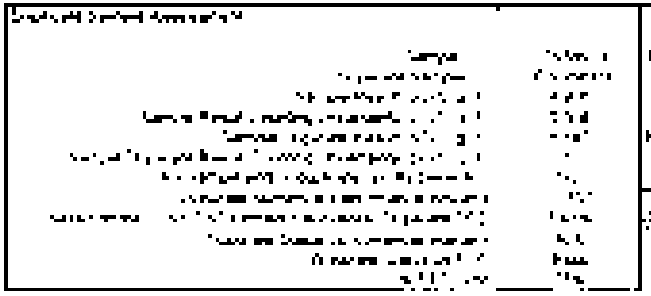
Quality Control Sample Performance Assessment

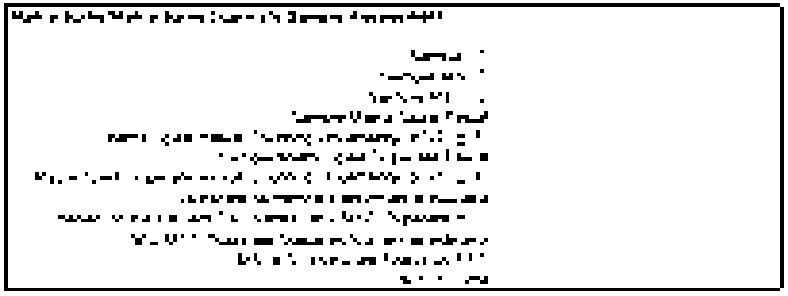
Quality Control Sample Performance Assessment



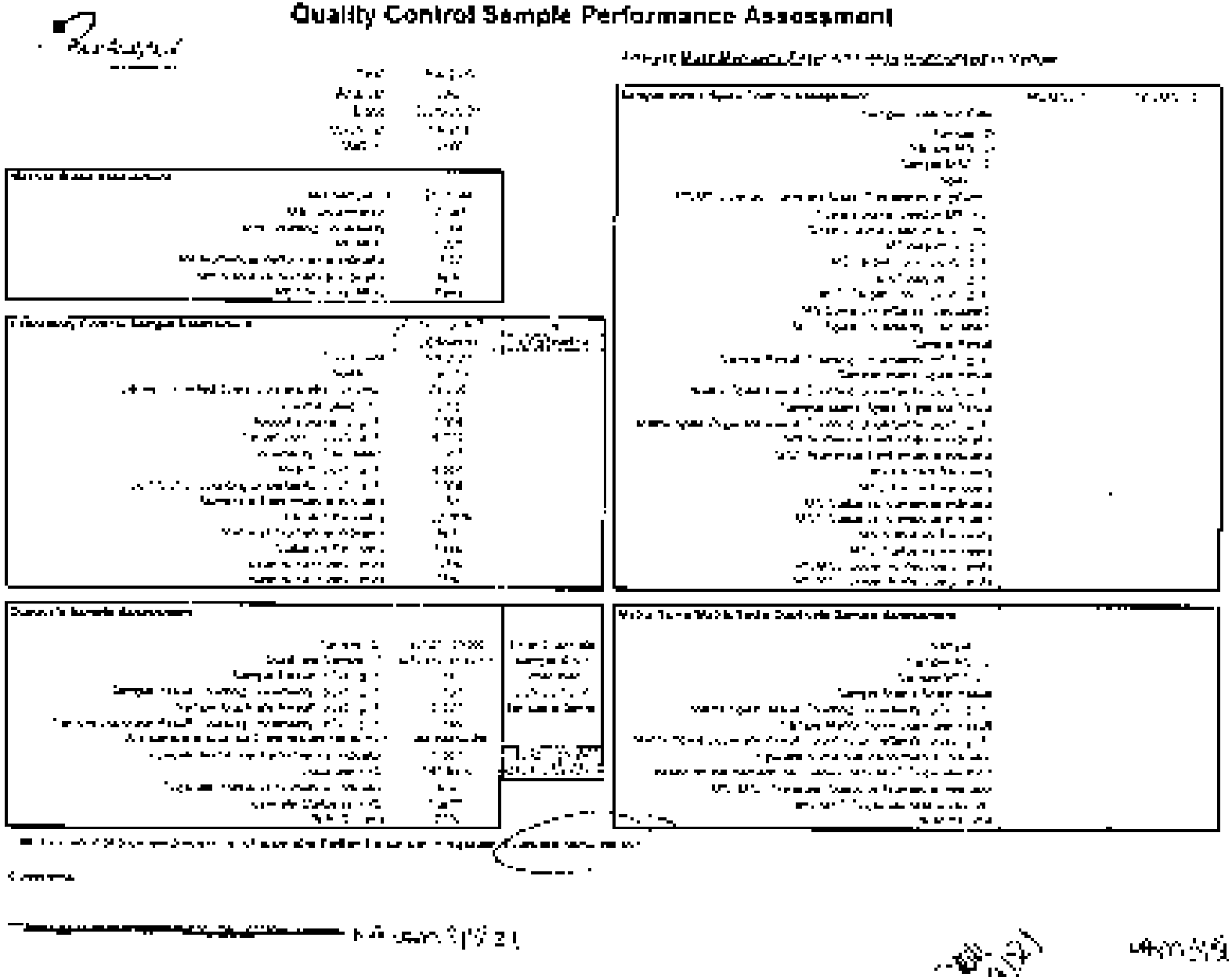








Quality Control Sample Performance Assessment



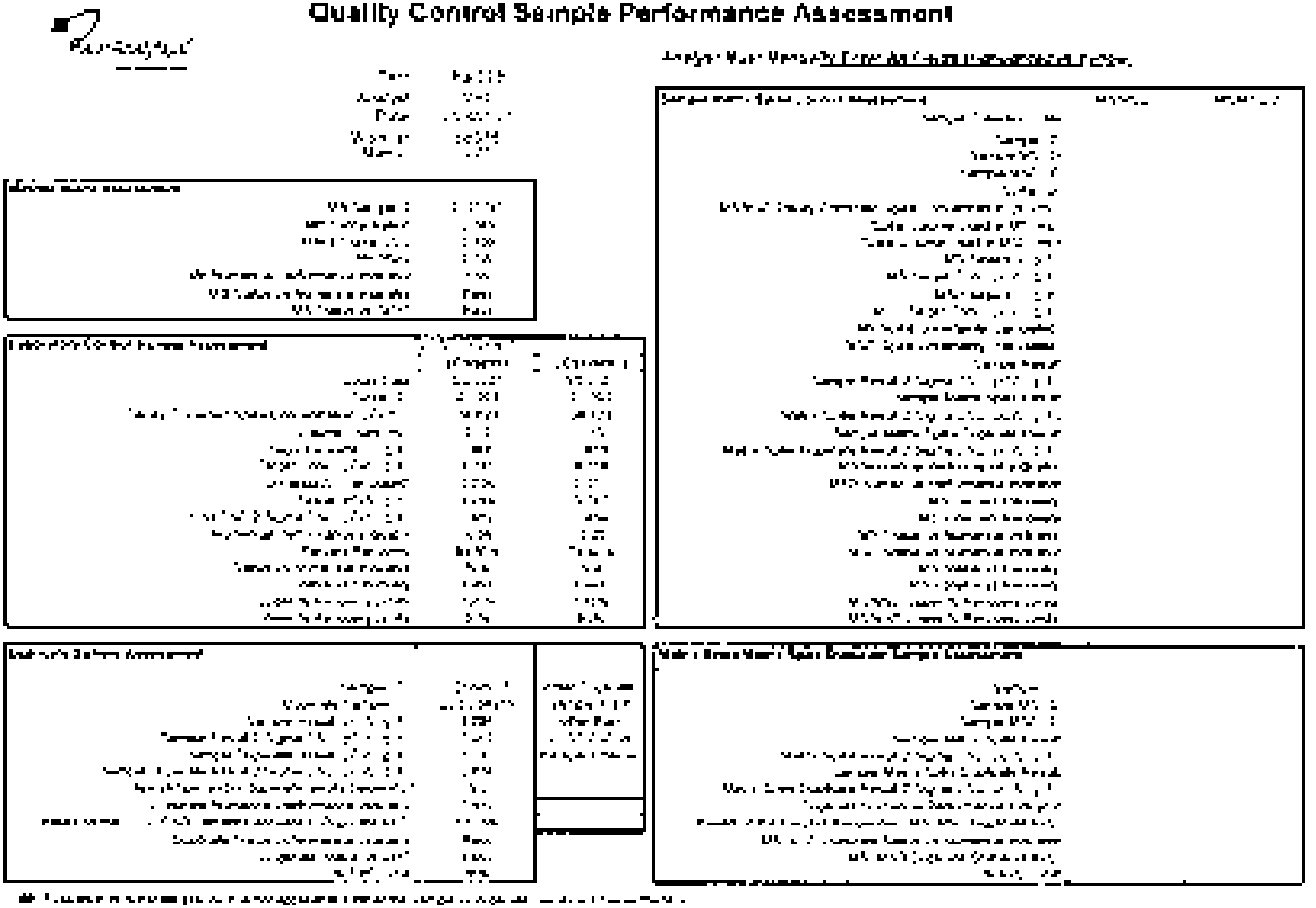
Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow

[illegible]

Comments:

Quality Control Sample Performance Assessment



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

March 11, 2021

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

RE: Project: YATES AMA RADS
Pace Project No.: 92521568

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between February 10, 2021 and February 12, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: YATES AMA RADS
Pace Project No.: 92521568

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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

SAMPLE SUMMARY

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92521568001	**YGWA-5D (020821)**	Water	02/08/21 16:45	02/10/21 17:10
92521568002	**DUP-01(020821)**	Water	02/08/21 00:00	02/10/21 17:10
92521568003	**YGWA-5I (020821)**	Water	02/08/21 16:20	02/10/21 17:10
92521568004	**YGWA-39 (021021)**	Water	02/10/21 09:30	02/10/21 17:10
92521568005	**YGWA-40 (021021)**	Water	02/10/21 10:50	02/10/21 17:10
92521568006	**FB-01(021021)**	Water	02/10/21 11:05	02/10/21 17:10
92521568007	**YGWA-20S (020921)**	Water	02/09/21 16:50	02/10/21 17:10
92521568008	**YGWA-4I(020921)**	Water	02/09/21 09:50	02/10/21 17:10
92521568009	**YGWA-17S(020921)**	Water	02/09/21 11:15	02/10/21 17:10
92521568010	**YGWA-18S(020921)**	Water	02/09/21 13:25	02/10/21 17:10
92521568011	**YGWA-18I(020921)**	Water	02/09/21 14:00	02/10/21 17:10
92521568012	**YGWA-21I(020921)**	Water	02/09/21 16:10	02/10/21 17:10
92521568013	**YGWA-3I(021021)**	Water	02/10/21 16:40	02/11/21 13:03
92521568014	**YGWA-3D(021021)**	Water	02/10/21 17:25	02/11/21 13:03
92521568015	**YGWA-30I(021121)**	Water	02/11/21 09:50	02/11/21 13:03
92521568016	**FB-01(021121)**	Water	02/11/21 10:00	02/11/21 13:03
92521568017	**EB-01(021121)**	Water	02/11/21 12:05	02/11/21 13:03
92521568018	**YGWA-40 (021021) MS**	Water	02/10/21 10:50	02/10/21 17:10
92521568019	**YGWA-40 (021021) MSD**	Water	02/10/21 10:50	02/10/21 17:10
92521567001	**EB-02 (021021)**	Water	02/10/21 11:30	02/10/21 17:10
92521567003	**DUP-1 (021021)**	Water	02/10/21 00:00	02/10/21 17:10
92521567002	**YGWA-14S (021021)**	Water	02/10/21 08:50	02/10/21 17:10
92521567010	**YGWA-1I (021221)**	Water	02/12/21 13:20	02/12/21 17:10
92521567011	**YGWA-1D (021221)**	Water	02/12/21 11:55	02/12/21 17:10
92521567017	**YGWA-1D (021221) MS**	Water	02/12/21 11:55	02/12/21 17:10
92521567018	**YGWA-1D (021221) MSD**	Water	02/12/21 11:55	02/12/21 17:10
92521572002	**YGWA-2I(021021)**	Water	02/10/21 12:40	02/10/21 17:10

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SAMPLE ANALYTE COUNT

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521568001	**YGWA-5D (020821)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568002	**DUP-01(020821)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568003	**YGWA-5I (020821)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568004	**YGWA-39 (021021)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568005	**YGWA-40 (021021)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568006	**FB-01(021021)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568007	**YGWA-20S (020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568008	**YGWA-4I(020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568009	**YGWA-17S(020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568010	**YGWA-18S(020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568011	**YGWA-18I(020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568012	**YGWA-21I(020921)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568013	**YGWA-3I(021021)**	EPA 9315	LAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568014	**YGWA-3D(021021)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568015	**YGWA-30I(021121)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568016	**FB-01(021121)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568017	**EB-01(021121)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521568018	**YGWA-40 (021021) MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92521568019	**YGWA-40 (021021) MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92521567001	**EB-02 (021021)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567003	**DUP-1 (021021)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567002	**YGWA-14S (021021)**	EPA 9315	MK1	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92521567010	**YGWA-1I (021221)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521567011	**YGWA-1D (021221)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92521567017	**YGWA-1D (021221) MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92521567018	**YGWA-1D (021221) MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92521572002	**YGWA-2I(021021)**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568001	**YGWA-5D (020821)**					
EPA 9315	Radium-226	2.30 ± 0.514 (0.306) C:89% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.591 ± 0.501 (1.00) C:79% T:67%	pCi/L		03/01/21 16:19	
Total Radium Calculation	Total Radium	2.89 ± 1.02 (1.31)	pCi/L		03/05/21 14:00	
92521568002	**DUP-01(020821)**					
EPA 9315	Radium-226	0.171 ± 0.133 (0.235) C:92% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.0142 ± 0.351 (0.815) C:80% T:79%	pCi/L		03/01/21 16:19	
Total Radium Calculation	Total Radium	0.185 ± 0.484 (1.05)	pCi/L		03/05/21 14:00	
92521568003	**YGWA-5I (020821)**					
EPA 9315	Radium-226	0.476 ± 0.249 (0.427) C:90% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.137 ± 0.351 (0.783) C:82% T:79%	pCi/L		03/01/21 16:19	
Total Radium Calculation	Total Radium	0.613 ± 0.600 (1.21)	pCi/L		03/05/21 14:00	
92521568004	**YGWA-39 (021021)**					
EPA 9315	Radium-226	0.363 ± 0.187 (0.306) C:96% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.155 ± 0.298 (0.655) C:87% T:90%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.518 ± 0.485 (0.961)	pCi/L		03/05/21 14:00	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568005	**YGWA-40 (021021)**					
EPA 9315	Radium-226	0.346 ± 0.178 (0.255) C:93% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.437 ± 0.487 (1.02) C:90% T:61%	pCi/L		03/01/21 16:19	
Total Radium Calculation	Total Radium	0.783 ± 0.665 (1.28)	pCi/L		03/05/21 14:00	
92521568006	**FB-01(021021)**					
EPA 9315	Radium-226	0.0756 ± 0.104 (0.217) C:87% T:NA	pCi/L		03/05/21 07:15	
EPA 9320	Radium-228	0.0378 ± 0.302 (0.696) C:86% T:83%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.113 ± 0.406 (0.913)	pCi/L		03/05/21 14:00	
92521568007	**YGWA-20S (020921)**					
EPA 9315	Radium-226	0.0222 ± 0.0899 (0.230) C:94% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.262 ± 0.354 (0.756) C:84% T:79%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.284 ± 0.444 (0.986)	pCi/L		03/05/21 14:00	
92521568008	**YGWA-4I(020921)**					
EPA 9315	Radium-226	0.492 ± 0.201 (0.224) C:89% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.134 ± 0.379 (0.848) C:84% T:78%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.626 ± 0.580 (1.07)	pCi/L		03/05/21 14:00	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568009	**YGWA-17S(020921)**					
EPA 9315	Radium-226	0.0845 ± 0.101 (0.203) C:86% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.444 ± 0.512 (1.08) C:89% T:63%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.529 ± 0.613 (1.28)	pCi/L		03/05/21 14:00	
92521568010	**YGWA-18S(020921)**					
EPA 9315	Radium-226	0.0536 ± 0.0925 (0.208) C:92% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.205 ± 0.313 (0.676) C:82% T:78%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.259 ± 0.406 (0.884)	pCi/L		03/05/21 14:00	
92521568011	**YGWA-18I(020921)**					
EPA 9315	Radium-226	0.147 ± 0.123 (0.217) C:89% T:NA	pCi/L		03/05/21 07:48	
EPA 9320	Radium-228	0.167 ± 0.338 (0.745) C:86% T:79%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.314 ± 0.461 (0.962)	pCi/L		03/05/21 14:00	
92521568012	**YGWA-21I(020921)**					
EPA 9315	Radium-226	0.925 ± 0.287 (0.231) C:91% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.315 ± 0.363 (0.763) C:88% T:79%	pCi/L		03/01/21 16:21	
Total Radium Calculation	Total Radium	1.24 ± 0.650 (0.994)	pCi/L		03/05/21 14:00	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568013	**YGWA-3I(021021)**					
EPA 9315	Radium-226	1.10 ± 0.317 (0.250) C:91% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	1.36 ± 0.549 (0.874) C:90% T:68%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	2.46 ± 0.866 (1.12)	pCi/L		03/05/21 14:00	
92521568014	**YGWA-3D(021021)**					
EPA 9315	Radium-226	1.59 ± 0.397 (0.248) C:91% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	2.06 ± 0.635 (0.822) C:84% T:79%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	3.65 ± 1.03 (1.07)	pCi/L		03/05/21 14:00	
92521568015	**YGWA-30I(021121)**					
EPA 9315	Radium-226	0.0594 ± 0.0766 (0.153) C:94% T:NA	pCi/L		03/05/21 07:27	
EPA 9320	Radium-228	0.619 ± 0.427 (0.833) C:86% T:79%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.678 ± 0.504 (0.986)	pCi/L		03/05/21 14:00	
92521568016	**FB-01(021121)**					
EPA 9315	Radium-226	0.0929 ± 0.0996 (0.196) C:96% T:NA	pCi/L		03/05/21 07:28	
EPA 9320	Radium-228	0.419 ± 0.398 (0.821) C:88% T:80%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.512 ± 0.498 (1.02)	pCi/L		03/05/21 14:00	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521568017	**EB-01(021121)**					
EPA 9315	Radium-226	0.0319 ± 0.0775 (0.187) C:87% T:NA	pCi/L		03/05/21 07:28	
EPA 9320	Radium-228	0.648 ± 0.478 (0.941) C:86% T:67%	pCi/L		03/01/21 16:20	
Total Radium Calculation	Total Radium	0.680 ± 0.556 (1.13)	pCi/L		03/05/21 14:00	
92521568018	**YGWA-40 (021021) MS**					
EPA 9315	Radium-226	102.72 %REC ± NA (NA) C:NA T:NA	pCi/L		03/05/21 07:28	
EPA 9320	Radium-228	82.38 %REC ± NA (NA) C:NA T:NA	pCi/L		03/01/21 16:20	
92521568019	**YGWA-40 (021021) MSD**					
EPA 9315	Radium-226	93.67%REC 9.21RPD ± NA (NA) C:NA T:NA	pCi/L		03/05/21 07:28	
EPA 9320	Radium-228	62.49 %REC 27.45 RPD ± NA (NA) C:NA T:NA	pCi/L		03/01/21 16:20	
92521567001	**EB-02 (021021)**					
EPA 9315	Radium-226	0.0550 ± 0.0861 (0.188) C:84% T:NA	pCi/L		03/05/21 07:30	
EPA 9320	Radium-228	-0.0344 ± 0.302 (0.716) C:69% T:90%	pCi/L		02/26/21 11:30	
Total Radium Calculation	Total Radium	0.0550 ± 0.388 (0.904)	pCi/L		03/05/21 14:01	
92521567003	**DUP-1 (021021)**					
EPA 9315	Radium-226	0.0865 ± 0.0955 (0.184) C:82% T:NA	pCi/L		03/05/21 07:30	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521567003	**DUP-1 (021021)**					
EPA 9320	Radium-228	0.528 ± 0.390 (0.755) C:71% T:78%	pCi/L		02/26/21 11:30	
Total Radium Calculation	Total Radium	0.615 ± 0.486 (0.939)	pCi/L		03/05/21 14:01	
92521567002	**YGWA-14S (021021)**					
EPA 9315	Radium-226	0.173 ± 0.123 (0.203) C:90% T:NA	pCi/L		03/05/21 07:30	
EPA 9320	Radium-228	0.180 ± 0.339 (0.746) C:73% T:75%	pCi/L		02/26/21 11:30	
Total Radium Calculation	Total Radium	0.353 ± 0.462 (0.949)	pCi/L		03/05/21 14:01	
92521567010	**YGWA-1I (021221)**					
EPA 9315	Radium-226	0.136 ± 0.0809 (0.131) C:94% T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	0.322 ± 0.541 (1.18) C:72% T:83%	pCi/L		03/09/21 17:17	
Total Radium Calculation	Total Radium	0.458 ± 0.622 (1.31)	pCi/L		03/10/21 15:19	
92521567011	**YGWA-1D (021221)**					
EPA 9315	Radium-226	0.275 ± 0.0990 (0.123) C:95% T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	0.0910 ± 0.322 (0.726) C:81% T:87%	pCi/L		03/09/21 15:27	
Total Radium Calculation	Total Radium	0.366 ± 0.421 (0.849)	pCi/L		03/10/21 14:15	
92521567017	**YGWA-1D (021221) MS**					
EPA 9315	Radium-226	98.68 %REC ± NA (NA) C:NA T:NA	pCi/L		03/09/21 19:03	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92521567017	**YGWA-1D (021221) MS**					
EPA 9320	Radium-228	106.48 %REC ± NA (NA) C:NA T:NA	pCi/L		03/09/21 15:27	
92521567018	**YGWA-1D (021221) MSD**					
EPA 9315	Radium-226	91.79 %REC 7.24 RPD ± NA (NA) C:NA T:NA	pCi/L		03/09/21 19:03	
EPA 9320	Radium-228	91.25 %REC 15.40 RPD ± NA (NA) C:NA T:NA	pCi/L		03/09/21 15:28	
92521572002	**YGWA-2I(021021)**					
EPA 9315	Radium-226	0.209 ± 0.130 (0.198) C:83% T:NA	pCi/L		03/02/21 11:26	
EPA 9320	Radium-228	0.831 ± 0.551 (1.06) C:70% T:78%	pCi/L		02/24/21 15:31	
Total Radium Calculation	Total Radium	1.04 ± 0.681 (1.26)	pCi/L		03/02/21 16:35	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-5D (020821) **Lab ID: 92521568001** Collected: 02/08/21 16:45 Received: 02/10/21 17:10 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	**2.30 ± 0.514 (0.306) C:89% T:NA**	pCi/L	03/05/21 07:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.591 ± 0.501 (1.00) C:79% T:67%**	pCi/L	03/01/21 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.89 ± 1.02 (1.31)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: DUP-01(020821) **Lab ID: 92521568002** Collected: 02/08/21 00:00 Received: 02/10/21 17:10 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	**0.171 ± 0.133 (0.235) C:92% T:NA**	pCi/L	03/05/21 07:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0142 ± 0.351 (0.815) C:80% T:79%**	pCi/L	03/01/21 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.185 ± 0.484 (1.05)**	pCi/L	03/05/21 14:00	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-5I (020821) **Lab ID: 92521568003** Collected: 02/08/21 16:20 Received: 02/10/21 17:10 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	**0.476 ± 0.249 (0.427) C:90% T:NA**	pCi/L	03/05/21 07:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.137 ± 0.351 (0.783) C:82% T:79%**	pCi/L	03/01/21 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.613 ± 0.600 (1.21)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-39 (021021) **Lab ID: 92521568004** Collected: 02/10/21 09:30 Received: 02/10/21 17:10 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	**0.363 ± 0.187 (0.306) C:96% T:NA**	pCi/L	03/05/21 07:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.155 ± 0.298 (0.655) C:87% T:90%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.518 ± 0.485 (0.961)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-40 (021021) **Lab ID: 92521568005** Collected: 02/10/21 10:50 Received: 02/10/21 17:10 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	**0.346 ± 0.178 (0.255) C:93% T:NA**	pCi/L	03/05/21 07:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.437 ± 0.487 (1.02) C:90% T:61%**	pCi/L	03/01/21 16:19	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.783 ± 0.665 (1.28)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: FB-01(021021) **Lab ID: 92521568006** Collected: 02/10/21 11:05 Received: 02/10/21 17:10 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	**0.0756 ± 0.104 (0.217) C:87% T:NA**	pCi/L	03/05/21 07:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0378 ± 0.302 (0.696) C:86% T:83%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.113 ± 0.406 (0.913)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-20S (020921) **Lab ID: 92521568007** Collected: 02/09/21 16:50 Received: 02/10/21 17:10 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	**0.0222 ± 0.0899 (0.230) C:94% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.262 ± 0.354 (0.756) C:84% T:79%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.284 ± 0.444 (0.986)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-4I(020921) **Lab ID: 92521568008** Collected: 02/09/21 09:50 Received: 02/10/21 17:10 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	**0.492 ± 0.201 (0.224) C:89% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.134 ± 0.379 (0.848) C:84% T:78%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.626 ± 0.580 (1.07)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-17S(020921) **Lab ID: 92521568009** Collected: 02/09/21 11:15 Received: 02/10/21 17:10 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	**0.0845 ± 0.101 (0.203) C:86% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.444 ± 0.512 (1.08) C:89% T:63%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.529 ± 0.613 (1.28)**	pCi/L	03/05/21 14:00	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-18S(020921) **Lab ID: 92521568010** Collected: 02/09/21 13:25 Received: 02/10/21 17:10 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	**0.0536 ± 0.0925 (0.208) C:92% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.205 ± 0.313 (0.676) C:82% T:78%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.259 ± 0.406 (0.884)**	pCi/L	03/05/21 14:00	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-18I(020921) **Lab ID: 92521568011** Collected: 02/09/21 14:00 Received: 02/10/21 17:10 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	**0.147 ± 0.123 (0.217) C:89% T:NA**	pCi/L	03/05/21 07:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.167 ± 0.338 (0.745) C:86% T:79%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.314 ± 0.461 (0.962)**	pCi/L	03/05/21 14:00	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-21I(020921) **Lab ID: 92521568012** Collected: 02/09/21 16:10 Received: 02/10/21 17:10 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	**0.925 ± 0.287 (0.231) C:91% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.315 ± 0.363 (0.763) C:88% T:79%**	pCi/L	03/01/21 16:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.24 ± 0.650 (0.994)**	pCi/L	03/05/21 14:00	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-3I(021021) **Lab ID: 92521568013** Collected: 02/10/21 16:40 Received: 02/11/21 13:03 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	**1.10 ± 0.317 (0.250) C:91% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.36 ± 0.549 (0.874) C:90% T:68%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.46 ± 0.866 (1.12)**	pCi/L	03/05/21 14:00	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-3D(021021) **Lab ID: 92521568014** Collected: 02/10/21 17:25 Received: 02/11/21 13:03 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	**1.59 ± 0.397 (0.248) C:91% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.06 ± 0.635 (0.822) C:84% T:79%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.65 ± 1.03 (1.07)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-30I(021121) **Lab ID: 92521568015** Collected: 02/11/21 09:50 Received: 02/11/21 13:03 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	**0.0594 ± 0.0766 (0.153) C:94% T:NA**	pCi/L	03/05/21 07:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.619 ± 0.427 (0.833) C:86% T:79%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.678 ± 0.504 (0.986)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: FB-01(021121) **Lab ID: 92521568016** Collected: 02/11/21 10:00 Received: 02/11/21 13:03 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	**0.0929 ± 0.0996 (0.196) C:96% T:NA**	pCi/L	03/05/21 07:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.419 ± 0.398 (0.821) C:88% T:80%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.512 ± 0.498 (1.02)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: EB-01(021121) **Lab ID: 92521568017** Collected: 02/11/21 12:05 Received: 02/11/21 13:03 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	**0.0319 ± 0.0775 (0.187) C:87% T:NA**	pCi/L	03/05/21 07:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.648 ± 0.478 (0.941) C:86% T:67%**	pCi/L	03/01/21 16:20	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.680 ± 0.556 (1.13)**	pCi/L	03/05/21 14:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-40 (021021) MS **Lab ID: 92521568018** Collected: 02/10/21 10:50 Received: 02/10/21 17:10 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	**102.72 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/05/21 07:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**82.38 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/01/21 16:20	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-40 (021021) MSD **Lab ID: 92521568019** Collected: 02/10/21 10:50 Received: 02/10/21 17:10 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	**93.67%REC 9.21RPD ± NA (NA) C:NA T:NA**	pCi/L	03/05/21 07:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**62.49 %REC 27.45 RPD ± NA (NA) C:NA T:NA**	pCi/L	03/01/21 16:20	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: EB-02 (021021) **Lab ID: 92521567001** Collected: 02/10/21 11:30 Received: 02/10/21 17:10 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	**0.0550 ± 0.0861 (0.188) C:84% T:NA**	pCi/L	03/05/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0344 ± 0.302 (0.716) C:69% T:90%**	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0550 ± 0.388 (0.904)**	pCi/L	03/05/21 14:01	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: DUP-1 (021021) **Lab ID: 92521567003** Collected: 02/10/21 00:00 Received: 02/10/21 17:10 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	**0.0865 ± 0.0955 (0.184) C:82% T:NA**	pCi/L	03/05/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.528 ± 0.390 (0.755) C:71% T:78%**	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.615 ± 0.486 (0.939)**	pCi/L	03/05/21 14:01	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-14S (021021) **Lab ID: 92521567002** Collected: 02/10/21 08:50 Received: 02/10/21 17:10 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.173 ± 0.123 (0.203) C:90% T:NA**	pCi/L	03/05/21 07:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.180 ± 0.339 (0.746) C:73% T:75%**	pCi/L	02/26/21 11:30	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.353 ± 0.462 (0.949)**	pCi/L	03/05/21 14:01	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-1I (021221) **Lab ID: 92521567010** Collected: 02/12/21 13:20 Received: 02/12/21 17:10 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	**0.136 ± 0.0809 (0.131) C:94% T:NA**	pCi/L	03/09/21 19:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.322 ± 0.541 (1.18) C:72% T:83%**	pCi/L	03/09/21 17:17	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.458 ± 0.622 (1.31)**	pCi/L	03/10/21 15:19	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-1D (021221) **Lab ID: 92521567011** Collected: 02/12/21 11:55 Received: 02/12/21 17:10 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	**0.275 ± 0.0990 (0.123) C:95% T:NA**	pCi/L	03/09/21 19:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0910 ± 0.322 (0.726) C:81% T:87%**	pCi/L	03/09/21 15:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.366 ± 0.421 (0.849)**	pCi/L	03/10/21 14:15	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-1D (021221) MS **Lab ID: 92521567017** Collected: 02/12/21 11:55 Received: 02/12/21 17:10 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	**98.68 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/09/21 19:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**106.48 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/09/21 15:27	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-1D (021221) MSD **Lab ID: 92521567018** Collected: 02/12/21 11:55 Received: 02/12/21 17:10 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	**91.79 %REC 7.24 RPD ± NA (NA) C:NA T:NA**	pCi/L	03/09/21 19:03	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**91.25 %REC 15.40 RPD ± NA (NA) C:NA T:NA**	pCi/L	03/09/21 15:28	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

Sample: YGWA-2I(021021) **Lab ID: 92521572002** Collected: 02/10/21 12:40 Received: 02/10/21 17:10 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	**0.209 ± 0.130 (0.198) C:83% T:NA**	pCi/L	03/02/21 11:26	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.831 ± 0.551 (1.06) C:70% T:78%**	pCi/L	02/24/21 15:31	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.04 ± 0.681 (1.26)**	pCi/L	03/02/21 16:35	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 436983
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521567010, 92521567011, 92521567017, 92521567018

METHOD BLANK: 2109306 Matrix: Water
Associated Lab Samples: 92521567010, 92521567011, 92521567017, 92521567018

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0161 ± 0.0615 (0.127) C:96% T:NA	pCi/L	03/09/21 19:03	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 435783
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521567001, 92521567002, 92521567003

METHOD BLANK: 2103740 Matrix: Water
Associated Lab Samples: 92521567001, 92521567002, 92521567003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.267 ± 0.143 (0.193) C:92% T:NA	pCi/L	03/05/21 07:29	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 435459
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521572002

METHOD BLANK: 2102227
Matrix: Water
Associated Lab Samples: 92521572002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.276 ± 0.140 (0.180) C:89% T:NA	pCi/L	03/02/21 07:53	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 435781 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521568001, 92521568002, 92521568003, 92521568004, 92521568005, 92521568006, 92521568007, 92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014, 92521568015, 92521568016, 92521568017, 92521568018, 92521568019

METHOD BLANK: 2103737 Matrix: Water
Associated Lab Samples: 92521568001, 92521568002, 92521568003, 92521568004, 92521568005, 92521568006, 92521568007, 92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014, 92521568015, 92521568016, 92521568017, 92521568018, 92521568019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0349 ± 0.0874 (0.210) C:95% T:NA	pCi/L	03/05/21 07:14	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 435116
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521572002

METHOD BLANK: 2100680
Matrix: Water
Associated Lab Samples: 92521572002

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.356 ± 0.369 (0.763) C:72% T:87%	pCi/L	02/24/21 15:29	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 435780 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521568001, 92521568002, 92521568003, 92521568004, 92521568005, 92521568006, 92521568007, 92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014, 92521568015, 92521568016, 92521568017, 92521568018, 92521568019

METHOD BLANK: 2103736 Matrix: Water
Associated Lab Samples: 92521568001, 92521568002, 92521568003, 92521568004, 92521568005, 92521568006, 92521568007, 92521568008, 92521568009, 92521568010, 92521568011, 92521568012, 92521568013, 92521568014, 92521568015, 92521568016, 92521568017, 92521568018, 92521568019

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.175 ± 0.283 (0.615) C:84% T:89%	pCi/L	03/01/21 16:20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 436984
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521567010, 92521567011, 92521567017, 92521567018

METHOD BLANK: 2109307 Matrix: Water
Associated Lab Samples: 92521567010, 92521567011, 92521567017, 92521567018

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0130 ± 0.299 (0.696) C:76% T:89%	pCi/L	03/09/21 15:28	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92521568

QC Batch: 435784
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92521567001, 92521567002, 92521567003

METHOD BLANK: 2103741 Matrix: Water
Associated Lab Samples: 92521567001, 92521567002, 92521567003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.191 ± 0.338 (0.740) C:71% T:85%	pCi/L	02/26/21 11:33	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALIFIERS

Project: YATES AMA RADS
Pace Project No.: 92521568

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.

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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(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521567001	**EB-02 (021021)**	EPA 9315	435783		
92521567002	**YGWA-14S (021021)**	EPA 9315	435783		
92521567003	**DUP-1 (021021)**	EPA 9315	435783		
92521568001	**YGWA-5D (020821)**	EPA 9315	435781		
92521568002	**DUP-01(020821)**	EPA 9315	435781		
92521568003	**YGWA-5I (020821)**	EPA 9315	435781		
92521568004	**YGWA-39 (021021)**	EPA 9315	435781		
92521568005	**YGWA-40 (021021)**	EPA 9315	435781		
92521568006	**FB-01(021021)**	EPA 9315	435781		
92521568007	**YGWA-20S (020921)**	EPA 9315	435781		
92521568008	**YGWA-4I(020921)**	EPA 9315	435781		
92521568009	**YGWA-17S(020921)**	EPA 9315	435781		
92521568010	**YGWA-18S(020921)**	EPA 9315	435781		
92521568011	**YGWA-18I(020921)**	EPA 9315	435781		
92521568012	**YGWA-21I(020921)**	EPA 9315	435781		
92521572002	**YGWA-2I(021021)**	EPA 9315	435459		
92521568013	**YGWA-3I(021021)**	EPA 9315	435781		
92521568014	**YGWA-3D(021021)**	EPA 9315	435781		
92521568015	**YGWA-30I(021121)**	EPA 9315	435781		
92521568016	**FB-01(021121)**	EPA 9315	435781		
92521568017	**EB-01(021121)**	EPA 9315	435781		
92521567010	**YGWA-1I (021221)**	EPA 9315	436983		
92521567011	**YGWA-1D (021221)**	EPA 9315	436983		
92521567017	**YGWA-1D (021221) MS**	EPA 9315	436983		
92521567018	**YGWA-1D (021221) MSD**	EPA 9315	436983		
92521568018	**YGWA-40 (021021) MS**	EPA 9315	435781		
92521568019	**YGWA-40 (021021) MSD**	EPA 9315	435781		
92521567001	**EB-02 (021021)**	EPA 9320	435784		
92521567002	**YGWA-14S (021021)**	EPA 9320	435784		
92521567003	**DUP-1 (021021)**	EPA 9320	435784		
92521568001	**YGWA-5D (020821)**	EPA 9320	435780		
92521568002	**DUP-01(020821)**	EPA 9320	435780		
92521568003	**YGWA-5I (020821)**	EPA 9320	435780		
92521568004	**YGWA-39 (021021)**	EPA 9320	435780		
92521568005	**YGWA-40 (021021)**	EPA 9320	435780		
92521568006	**FB-01(021021)**	EPA 9320	435780		
92521568007	**YGWA-20S (020921)**	EPA 9320	435780		
92521568008	**YGWA-4I(020921)**	EPA 9320	435780		
92521568009	**YGWA-17S(020921)**	EPA 9320	435780		
92521568010	**YGWA-18S(020921)**	EPA 9320	435780		
92521568011	**YGWA-18I(020921)**	EPA 9320	435780		
92521568012	**YGWA-21I(020921)**	EPA 9320	435780		
92521572002	**YGWA-2I(021021)**	EPA 9320	435116		
92521568013	**YGWA-3I(021021)**	EPA 9320	435780		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA RADS
Pace Project No.: 92521568

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92521568014	**YGWA-3D(021021)**	EPA 9320	435780		
92521568015	**YGWA-30I(021121)**	EPA 9320	435780		
92521568016	**FB-01(021121)**	EPA 9320	435780		
92521568017	**EB-01(021121)**	EPA 9320	435780		
92521567010	**YGWA-1I (021221)**	EPA 9320	436984		
92521567011	**YGWA-1D (021221)**	EPA 9320	436984		
92521567017	**YGWA-1D (021221) MS**	EPA 9320	436984		
92521567018	**YGWA-1D (021221) MSD**	EPA 9320	436984		
92521568018	**YGWA-40 (021021) MS**	EPA 9320	435780		
92521568019	**YGWA-40 (021021) MSD**	EPA 9320	435780		
92521567001	**EB-02 (021021)**	Total Radium Calculation	437456		
92521567002	**YGWA-14S (021021)**	Total Radium Calculation	437456		
92521567003	**DUP-1 (021021)**	Total Radium Calculation	437456		
92521568001	**YGWA-5D (020821)**	Total Radium Calculation	437454		
92521568002	**DUP-01(020821)**	Total Radium Calculation	437454		
92521568003	**YGWA-5I (020821)**	Total Radium Calculation	437454		
92521568004	**YGWA-39 (021021)**	Total Radium Calculation	437454		
92521568005	**YGWA-40 (021021)**	Total Radium Calculation	437454		
92521568006	**FB-01(021021)**	Total Radium Calculation	437454		
92521568007	**YGWA-20S (020921)**	Total Radium Calculation	437454		
92521568008	**YGWA-4I(020921)**	Total Radium Calculation	437454		
92521568009	**YGWA-17S(020921)**	Total Radium Calculation	437454		
92521568010	**YGWA-18S(020921)**	Total Radium Calculation	437454		
92521568011	**YGWA-18I(020921)**	Total Radium Calculation	437454		
92521568012	**YGWA-21I(020921)**	Total Radium Calculation	437454		
92521572002	**YGWA-2I(021021)**	Total Radium Calculation	436928		
92521568013	**YGWA-3I(021021)**	Total Radium Calculation	437454		
92521568014	**YGWA-3D(021021)**	Total Radium Calculation	437454		
92521568015	**YGWA-30I(021121)**	Total Radium Calculation	437454		
92521568016	**FB-01(021121)**	Total Radium Calculation	437454		
92521568017	**EB-01(021121)**	Total Radium Calculation	437454		
92521567010	**YGWA-1I (021221)**	Total Radium Calculation	438070		
92521567011	**YGWA-1D (021221)**	Total Radium Calculation	438070		

Laboratory receiving samples:

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

[redacted] Client Name: GH Bowen

Project #: **WO# : 92521568**

92521568

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

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

Date/Initials Person Examining Contents: 3/1/21

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: 2.1 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): 2.1

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ___ Date/Time: ___

Project Manager SCURF Review: ___ Date: ___

Project Manager SRF Review: ___ Date: ___

CHAIN-OF-CUSTODY / Analytical Request Document

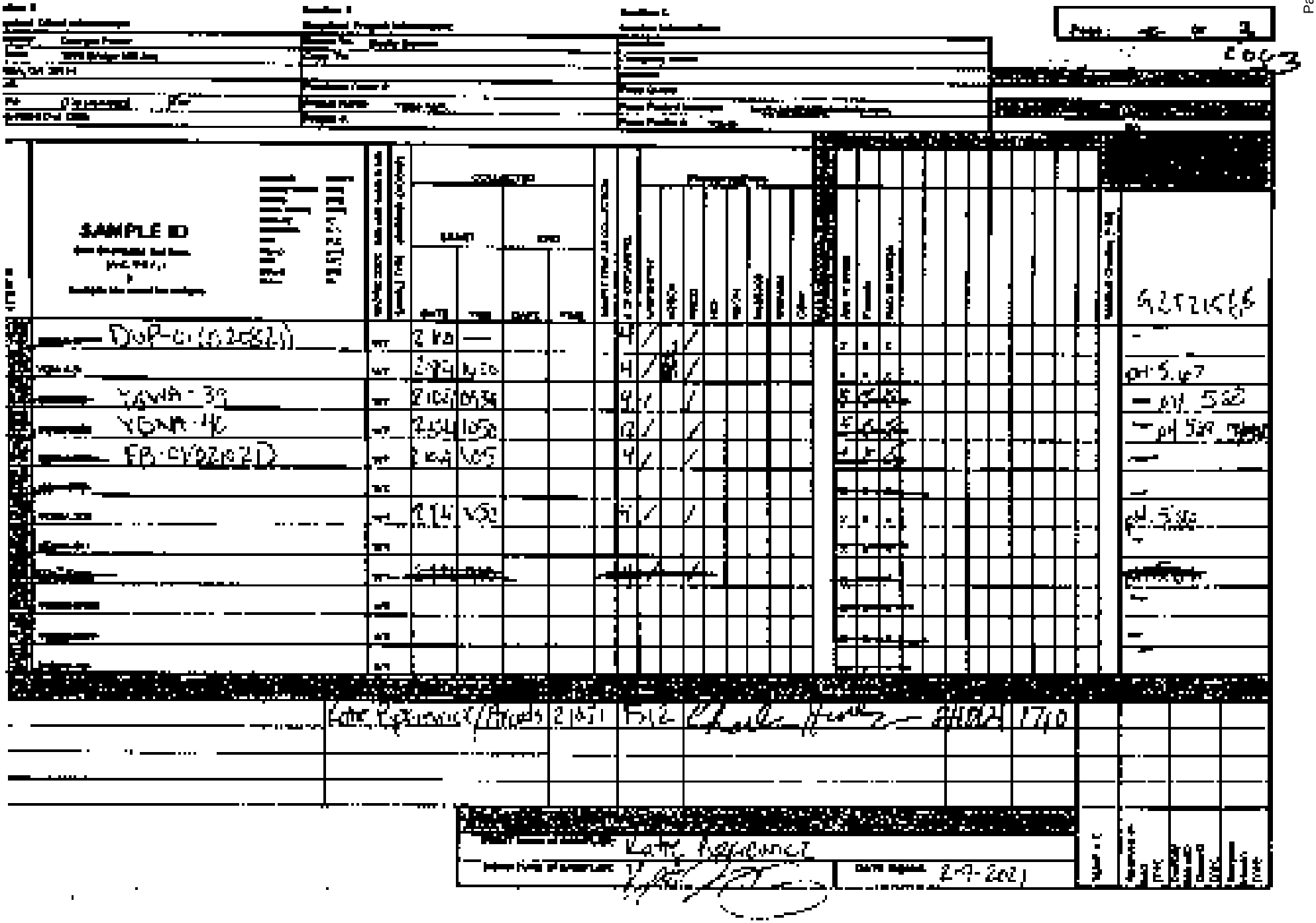
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 3

SAMPLE ID	Matrix	Sample Type	Collected Start DATE	TIME	Collected End DATE	TIME	Preservatives	Analyses	Residual Chlorine (Y/N)
	WT								
	WT								
	WT								
	WT								
	WT								
	WT								
	WT								
	WT								

CHAIN-OF-CUSTODY / Analytical Request Document

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



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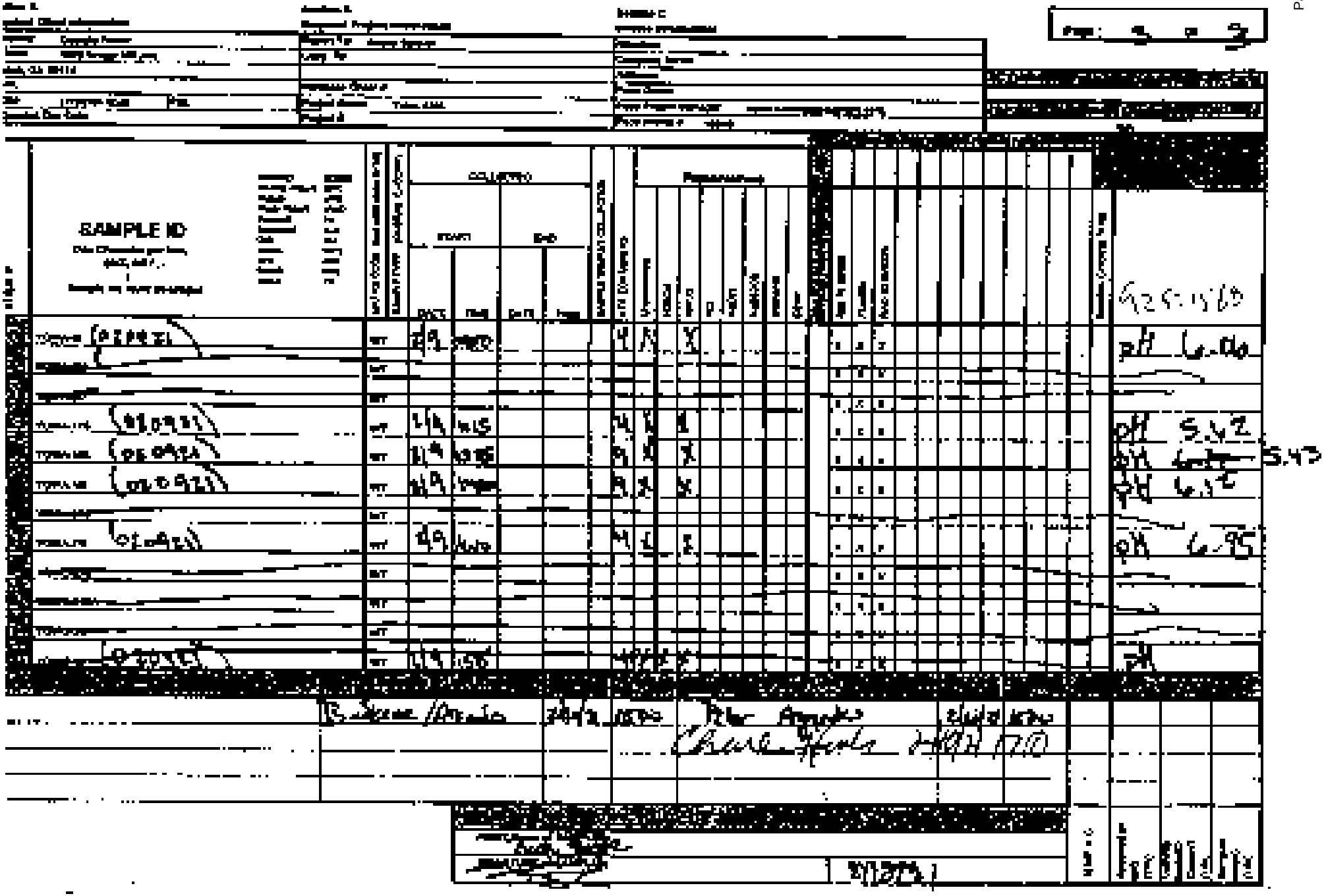

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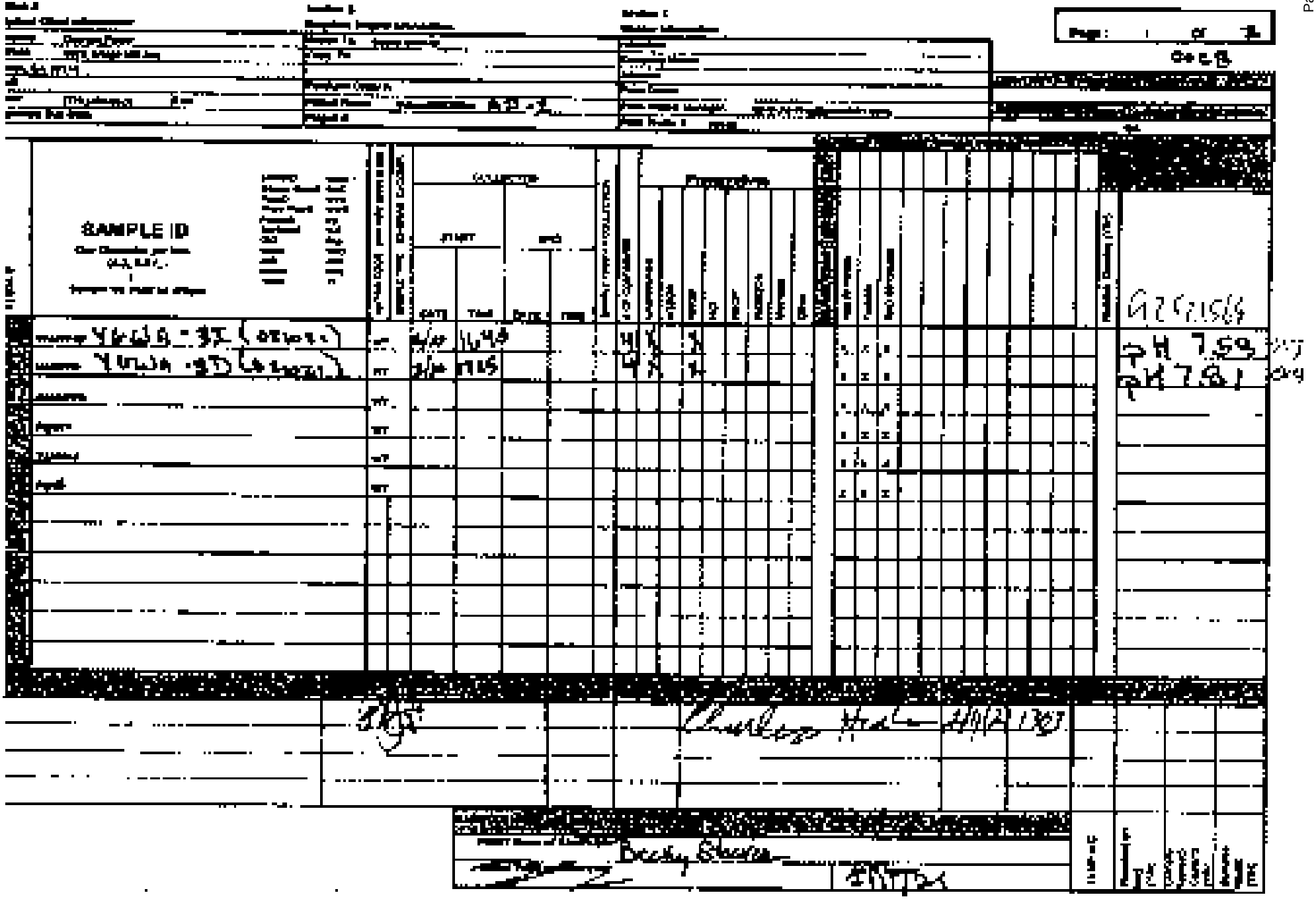
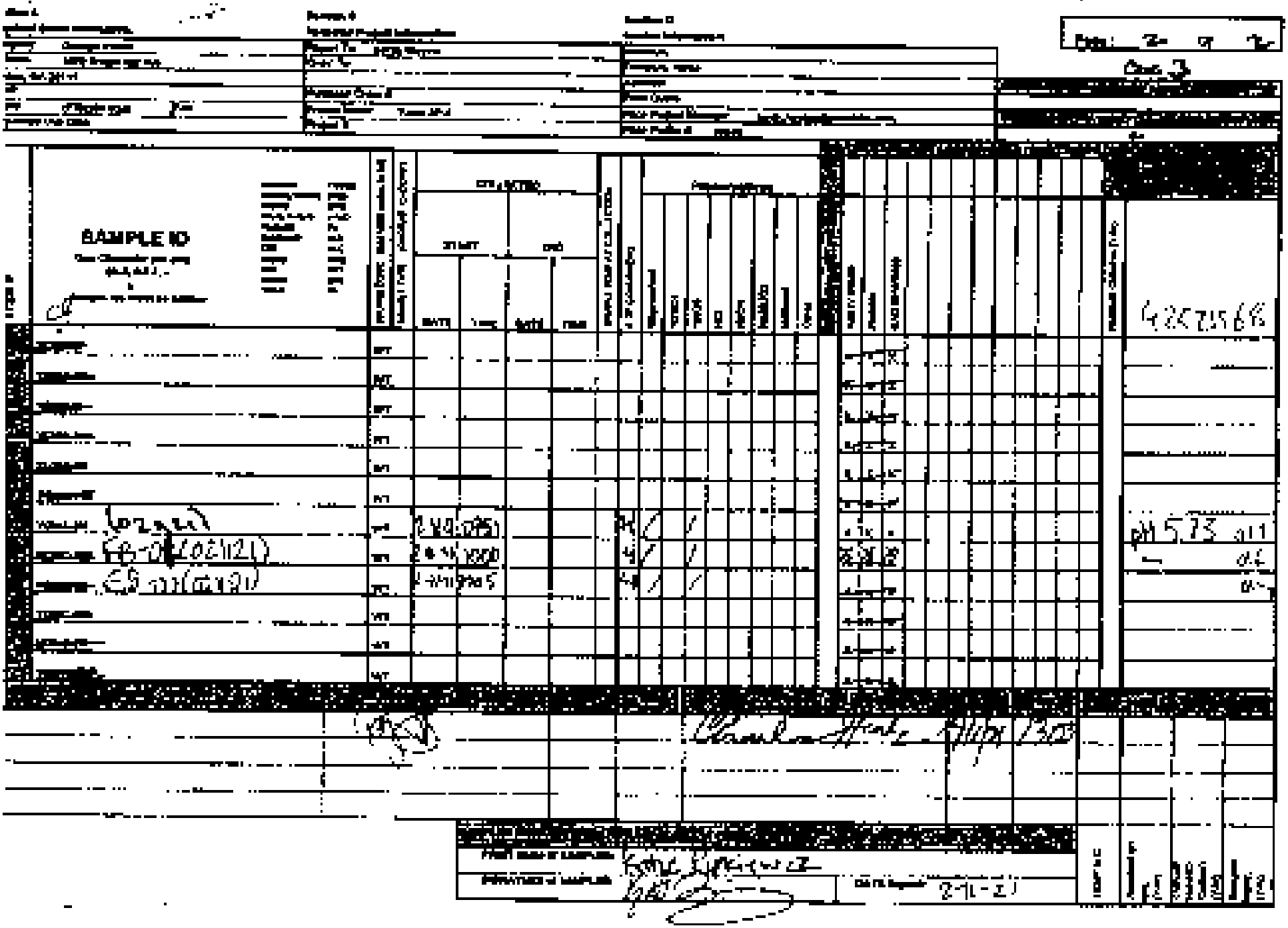


CHAIN-OF-CUSTODY / Analytical Request Document



Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Test:	Ra-226
Analyst:	LAL
Date:	2/26/2021
Worklist:	58911
Matrix:	DW

Method Blank Assessment	
MB Sample ID	2103737
MB concentration:	0.035
M/B Counting Uncertainty:	0.087
MB MDC:	0.210
MB Numerical Performance Indicator:	0.78
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS58911	**LCSD58911**
Count Date:	3/5/2021	3/5/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.040	24.040
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.508	0.501
Target Conc. (pCi/L, g, F):	4.737	4.795
Uncertainty (Calculated):	0.057	0.058
Result (pCi/L, g, F):	4.762	4.738
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.526	0.516
Numerical Performance Indicator:	0.09	-0.21
Percent Recovery:	100.53%	98.83%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	2/10/2021	
Sample I.D.	92521568005	
Sample MS I.D.	92521568018	
Sample MSD I.D.	92521568019	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.040	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.507	
MS Target Conc.(pCi/L, g, F):	9.481	
MSD Aliquot (L, g, F):	0.504	
MSD Target Conc. (pCi/L, g, F):	9.531	
MS Spike Uncertainty (calculated):	0.114	
MSD Spike Uncertainty (calculated):	0.114	
Sample Result:	0.346	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.170	
Sample Matrix Spike Result:	10.085	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	0.759	
Sample Matrix Spike Duplicate Result:	9.274	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.719	
MS Numerical Performance Indicator:	0.643	
MSD Numerical Performance Indicator:	-1.581	
MS Percent Recovery:	102.72%	
MSD Percent Recovery:	93.67%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

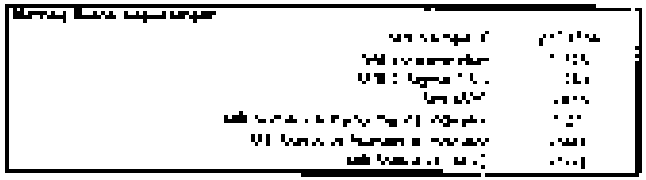
Duplicate Sample Assessment		
Sample I.D.:	LCS58911	Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.	LCSD58911	
Sample Result (pCi/L, g, F):	4.762	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.526	
Sample Duplicate Result (pCi/L, g, F):	4.738	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.516	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.062	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	1.71%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

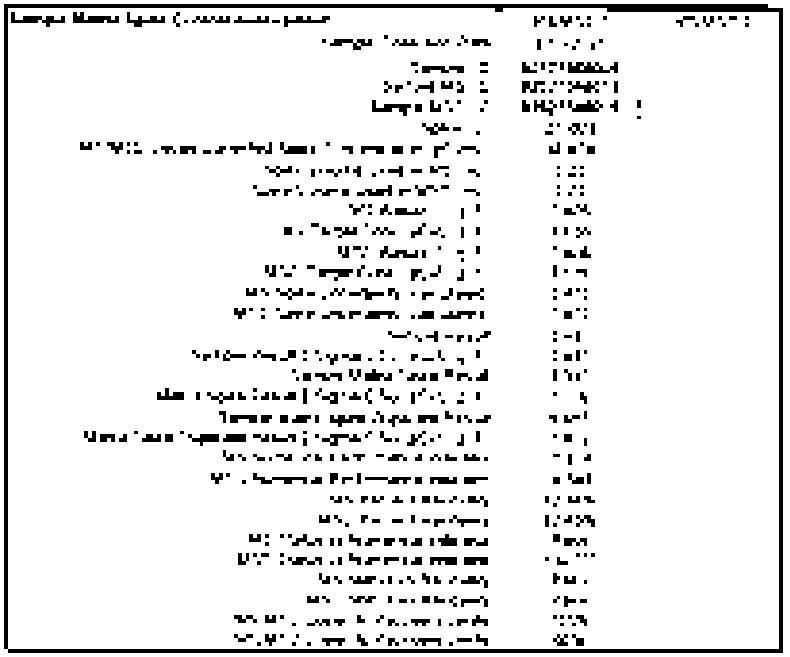
Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	92521568005
Sample MS I.D.	92521568018
Sample MSD I.D.	92521568019
Sample Matrix Spike Result:	10.085
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	0.759
Sample Matrix Spike Duplicate Result:	9.274
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.719
Duplicate Numerical Performance Indicator:	1.522
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.21%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

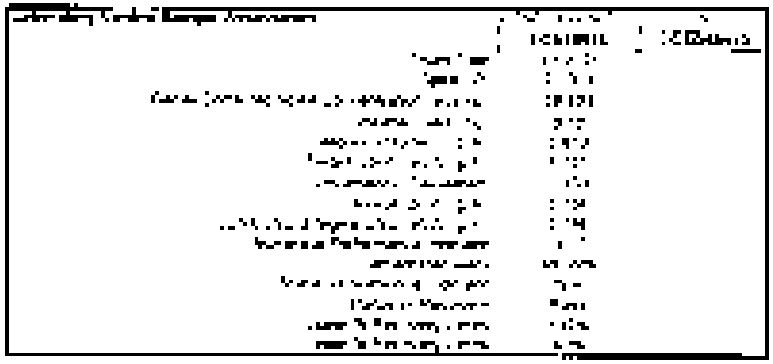
Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

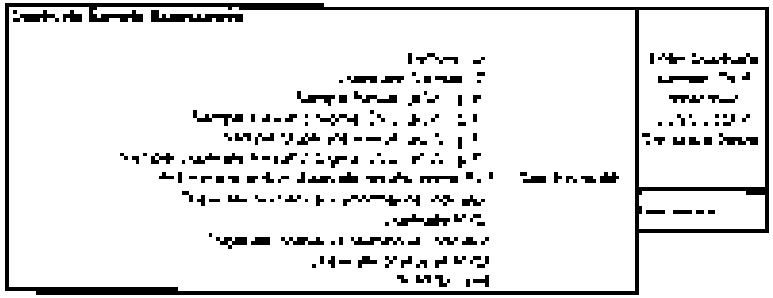
Comments:

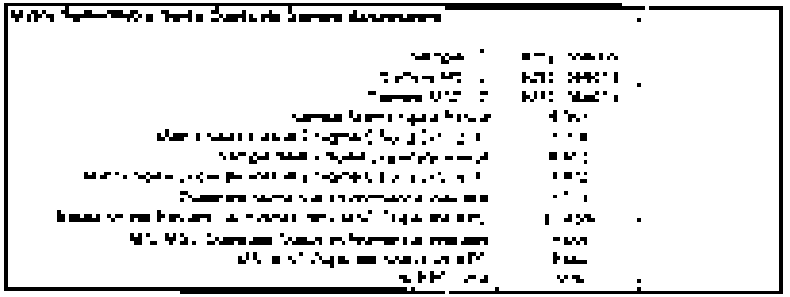
Quality Control Sample Performance Assessment





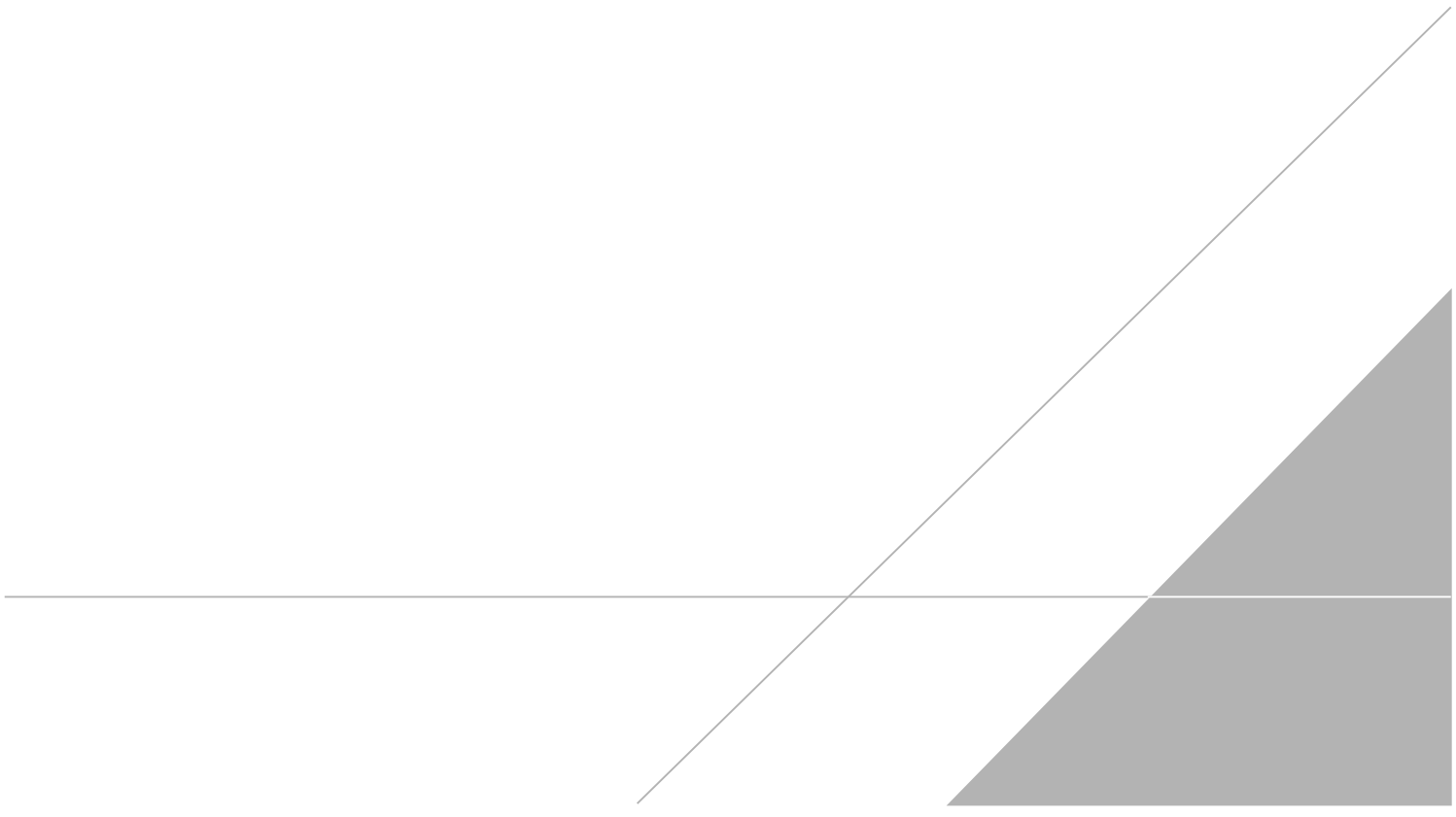






March 2021

Semiannual Event



ARCADIS

Georgia Power Co. – Plant Yates

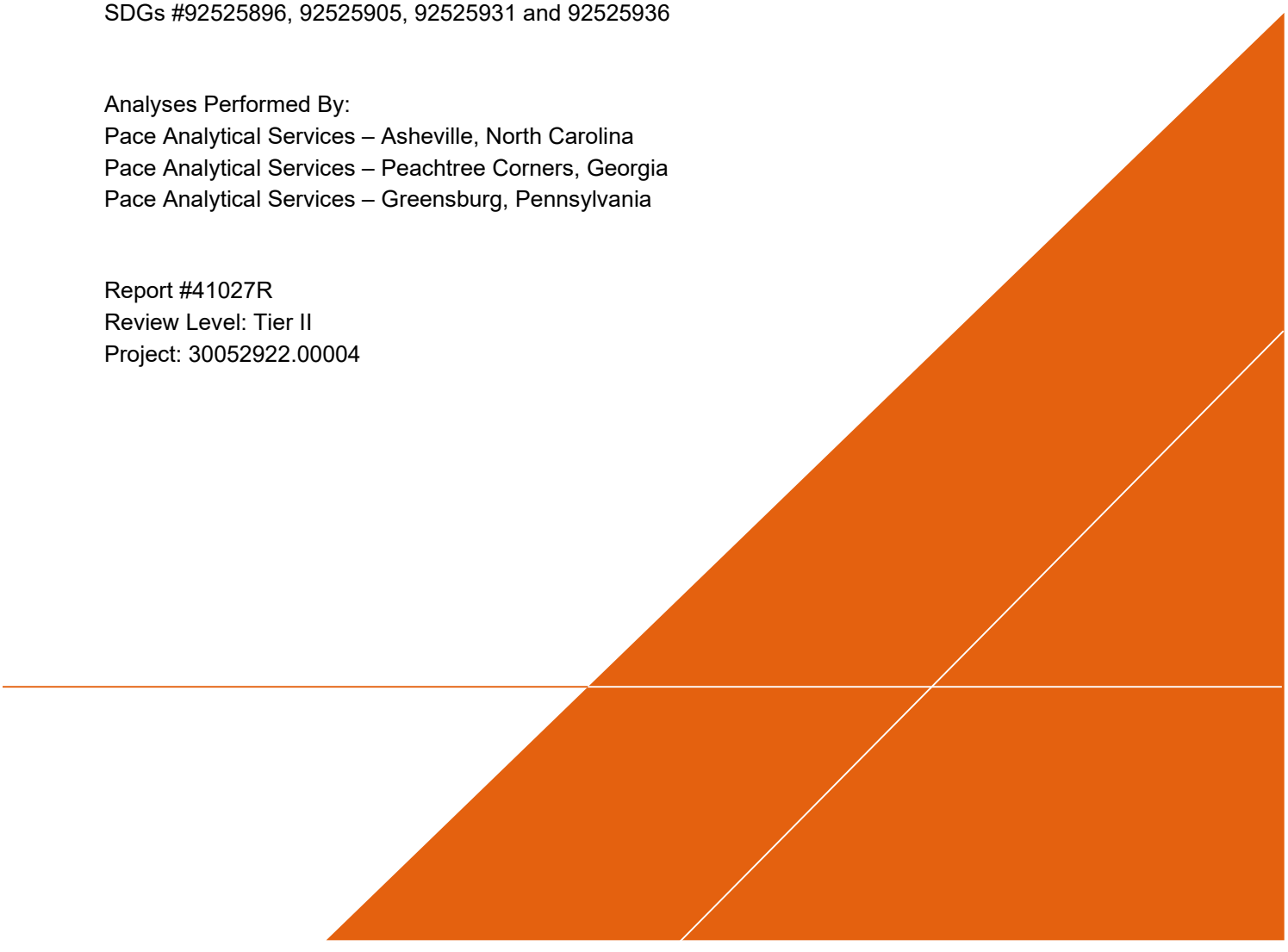
DATA REVIEW

Metals, Radium, and General Chemistry Analyses

SDGs #92525896, 92525905, 92525931 and 92525936

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

Report #41027R
Review Level: Tier II
Project: 30052922.00004



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Groups (SDGs) # 92525896, 92525905, 92525931 and 92525936 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:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92525896 92525931	YGWC-24SA	92525896-1 92525931-1	Water	03/03/21		X	X	X
	YGWC-36A	92525896-2 92525931-2	Water	03/04/21		X	X	X
	DUP-2	92525896-3 92525931-3	Water	03/03/21	YGWC-24SA	X	X	X
	YGWC-23S	92525896-4 92525931-4	Water	03/04/21		X	X	X
	YGWC-41	92525896-5 92525931-5	Water	03/04/21		X	X	X
	YGWC-43	92525896-6 92525931-6	Water	03/04/21		X	X	X
	FB-1	92525896-7 92525931-7	Water	03/04/21		X	X	X
	EB-2	92525896-8 92525931-8	Water	03/04/21		X	X	X
	YGWC-49	92525896-9 92525931-9	Water	03/04/21		X	X	X
	FB-02	92525896-10 92525931-10	Water	03/04/21		X	X	X
	YGWC-42	92525896-11 92525931-11	Water	03/04/21		X	X	X
	TGWC-38	92525896-12 92525931-12	Water	03/04/21		X	X	X
92525905 92525936	YAMW-2	92525905-1 92525936-1	Water	03/03/21		X	X	X
	YAMW-4	92525905-2 92525936-2	Water	03/03/21		X	X	X

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92525905 92525936	YAMW-5	92525905-3 92525936-3	Water	03/04/21		X	X	X
	YAMW-1	92525905-4 92525936-4	Water	03/03/21		X	X	X
	PZ-35	92525905-5 92525936-5	Water	03/04/21		X	X	X
	EB1	92525905-6 92525936-6	Water	03/04/21		X	X	X
	PZ-37	92525905-7 92525936-7	Water	03/04/21		X	X	X

Notes:

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of 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 (COC) 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, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January2017).

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

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

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - * Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reported sample detection 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 associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (B) of data. 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
YGWC-36A YGWC-23S	Lead (EB)	Detected sample results <RL and <BAL	“UB” at the RL

Note:

EB = Equipment blank

RL = Reporting limit

MB = Method Blank

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 performed on samples YGWC-24SA and YAMW-2 exhibited recoveries and RPDs within the control limits.

3.2 Laboratory Duplicate Analysis

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

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-24SA / DUP-2	Barium	0.025	0.026	3.9%
	Beryllium	0.000099 J	0.00011 J	AC

Note:

AC = Acceptable

The differences in the results between the parent sample YGWC-24SA and field duplicate sample DUP-2 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	
Field/Lab Duplicate (RPD)		X		X	
Reporting Limit Verification		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

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

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

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

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

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

All analytes associated with MS/MSD recoveries were within control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
YGWC-23S	Sulfate	74%	73%
YAMW-4	Sulfate	70%	65%

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

3.2 Laboratory Duplicate Analysis

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

The laboratory duplicate performed on sample PZ-37 for TDS exhibited an acceptable RPD.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-24SA / DUP-2	TDS	70	63	10.5%
	Chloride	8.6	8.6	0.0%

Notes:

AC = Acceptable

The differences in the results between the parent sample YGWC-24SA and field duplicate sample DUP-2 were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

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

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SM4500-H+ B, SM2540C, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment 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	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R Percent recovery

RPD Relative percent difference

RADIOLOGICAL ANALYSES

1. Holding Times

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

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

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

Blank results should be verified to be accurately reported and that tolerance limits (+/- 2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

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

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

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

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

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of < +/- 3 sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x_0 = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between +/-3 sigma. Warning limits have been established as +/- 2 sigma.

MS analysis was not performed using a sample from these SDGs.

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:

$$Z_{score} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

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 using sample YAMW-1 in association with SW-846 9315 analysis exhibited acceptable differences between the results.

4. Field Duplicate Analysis

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

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

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. For results greater than five times the MDC, a control limit of 35 percent for water matrices is applied to the RPD between the parent and field duplicate sample results. If the parent and field duplicate sample results are less than five times the MDC, for water matrices a control limit of two times the MDC is applied to the difference between the results.

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

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-24SA / DUP-2	Radium-226	0.139 +/- 0.138	4.78 +/- 0.878	AC
	Radium-228	0.276 +/- 0.454	0.329 +/- 0.440	
	Total Radium	0.415 +/- 0.592	5.11 +/- 1.32	

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD

Notes:

AC = Acceptable

The differences in the results between the parent sample YGWA-24SA and field duplicate sample DUP-2 were acceptable.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

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

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

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

The numerical performance indicator for a laboratory control sample is calculated

by:

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

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

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

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

LCS performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or

2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- YGWC-24SA – Radium 226, Radium 228 and Total Radium
- YGWC-36A - Radium 226, Radium 228 and Total Radium
- DUP-2 – Radium 226
- YGWC-23S - Radium 226, Radium 228 and Total Radium
- YGWC-41 – Radium 226
- FB-1 - Radium 226, Radium 228 and Total Radium
- EB-2 - Radium 226, Radium 228 and Total Radium
- YGWC-49 – Radium 228 and Total Radium
- FB-02 - Radium 226, Radium 228 and Total Radium
- YGWC-42 – Radium 226
- YGWC-38 - Radium 226, Radium 228 and Total Radium
- YAMW-2 - Radium 226, Radium 228 and Total Radium
- YAMW-4 – Radium 228
- YAMW-1 - Radium 226, Radium 228 and Total Radium
- PZ-35 - Radium 226, Radium 228 and Total Radium
- EB-1 - Radium 226, Radium 228 and Total Radium
- PZ-37 – Radium 228

8. System Performance and Overall Assessment

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

DATA VALIDATION CHECKLIST FOR RADIOLOGICALS

RADIOLOGICALS: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Gas-Flow Proportional System					
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)		X		X	
Laboratory Control Sample Duplicate (LCSD)		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
Field/Lab Duplicate (RPD)		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Rachelle Borne

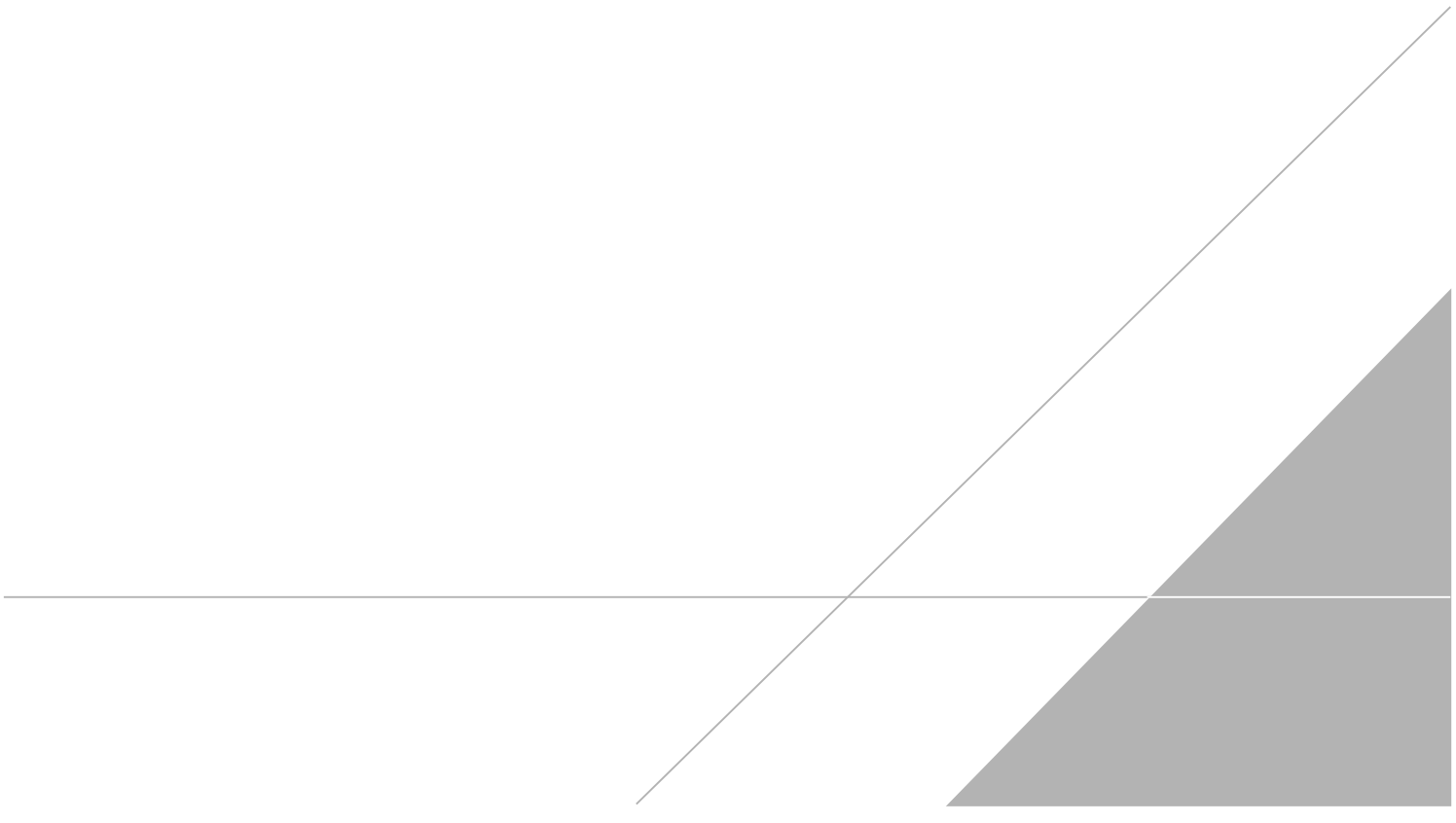
SIGNATURE: 

DATE: May 17, 2021

PEER REVIEW: Jennifer Singer

DATE: May 18, 2021

CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE



CHAIN-OF-CUSTODY / Analytical Request Document

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CDC 2

Section A — Required Client Information:
Company: Georgia Power
Address: 1025 Bridge Mill Ave
[illegible], GA 301[illegible]
Phone: (770) [illegible] | Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start DATE	Collected Start TIME	Collected End DATE	Collected End TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 226/228	Residual Chlorine (Y/N)	
13	[illegible]	WT		[illegible]	1150				5	X		X						X	X	X	X		pH = 5.70
14	[illegible]	WT		[illegible]	1255				5									X	X	X	X		pH = 5.67
15	DUP-2	WT		[illegible]	–				5									X	X	X	X		—
16		WT																					—
17		WT																					—
18		WT																					—
19		WT																					—
20		WT																					—
21		WT																					—
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	[illegible]	1606	[signature]	7/5/[illegible]	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter [illegible]
SIGNATURE of SAMPLER: [signature]
DATE Signed: [illegible]

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

CHAIN-OF-CUSTODY / Analytical Request Document

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COC 3

Section A Required Client Information:

Company:	Georgia Power
Address:	1070 Bridge Mill Ave
	..., GA 30114
Email:	
Phone:	(770)154-6526 Fax:
Requested Due Date:	

Section B Required Project Information:

Report To:	Becky Steever
Copy To:	
Purchase Order #:	
Project Name:	Yates AMA
Project #:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	kevin.herring@pacelabs.com,
Pace Profile #:	10240

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
13	YGWL-235	WT		3/4	1215				5	1		1						X	X	X	X		Ph: 5.44
14		WT																X	X	X	X		
15		WT																X	X	X	X		
16		WT																X	X	X	X		
17		WT																X	X	X	X		
18		WT																X	X	X	X		
19		WT																X	X	X	X		
20		WT																X	X	X	X		
21																							
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	Charlie Hauk	3/5/21	0930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 3/4/21

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

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COC 2

Section A — Required Client Information:
Company: Georgia Power
Address: [illegible]
Phone: [illegible]
Requested Due Date: [illegible]

Section B — Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: [illegible]
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Start DATE	Start TIME	End DATE	End TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	[struck out]	WT																X	X	X	X	
2	[struck out]	WT																				
3	YGWC-41	WT		3/4	0900				5	✓		✓						X	X	X	X	pH: 4.67
4	[struck out]	WT																X	X	X	X	
5	YGWC-43	WT		3/4	1450				5	✓		✓						X	X	X	X	pH: 5.88
6	[struck out]	WT																				
7	FB-1	WT		3/4	1400				5	✓		✓						X	X	X	X	
8	GB-2	WT		3/4	1635				5	✓		✓						X	X	X	X	
9																						
10																						
11																						
12																						

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	[signature]	3/5/21	1900	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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COC 8

Section A — Required Client Information:

Company:	Georgia Power
Address:	[illegible]
Email:	[illegible]
Phone:	[illegible]
Fax:	
Requested Due Date:	

Section B — Required Project Information:

Report To:	[illegible]
Copy To:	
Purchase Order #:	
Project Name:	Yates AMA
Project #:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	[illegible]
Pace Profile #:	[illegible]

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
13	[illegible] (struck through)	WT																x	x	x	x	—
14	[illegible] (struck through)	WT																x	x	x	x	—
15	YGWC-49	WT		3-4-21	1451				5	1		4						x	x	x	x	pH: 5.88
16	FB-02	WT		3-4-21	1500				5	1		4						x	x	x	x	—
17		WT																x	x	x	x	
18		WT																x	x	x	x	
19		WT																x	x	x	x	
20		WT																x	x	x	x	
21																						
22																						
23																						
24																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3-4-21	1645	Chuck [illegible]	3/5/21	0920	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Bojkiewicz

SIGNATURE of SAMPLER: [signature]

DATE Signed: 3-4-21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 5 of 5

Section A
Required Client Information:
Company: Georgia Power
Address: 1973 Bridge Mill Ave
Mon, GA 30114
Email:
Phone: (770) 684-4324 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Brooke Downer
Copy To:
Purchase Order #:
Project Name: Yates 7th
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10840

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test: TDS	Cl, F, SO4	App Gr Alpha	Rad 226/228	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
1		WT																					
2		WT																					
3		WT																					
4	YDWC-02	WT		3-4-21	8:45				5	✓					✓								pH: 5.59
5		WT																					
6	YDWC-09	WT		3-4-21	13:45				5	✓					✓								pH: 5.01
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		3-4-21	16:45		3/4/21	1652	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Petruska
SIGNATURE of SAMPLER: DATE Signed: 3-4-21

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

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Page: 1 Of 2

COC 6

Section A Required Client Information:
Company: Georgia Power
Address: [illegible] Bridge Mill Ave
[illegible], GA 30114
Phone: [illegible] Fax:
Requested Due Date:

Section B Required Project Information:
Report To: Becky Steeves
Copy To:
Purchase Order #:
Project Name: Yates [illegible]
Project #:

Section C Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App. III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YAMW-2	WT		[illegible]	1410				5	X		X						X	X	X	X		pH: 5.67
2	YAMW-4	WT		[illegible]	1305				5	X		X						X	X	X	X		pH: 6.80
3	YAMW-3	WT		[illegible]	1415				5	X		X						X	X	X	X		pH: 5.32
4	[struck through]	WT																X	X	X	X		
5	YAMW-1	WT		[illegible]	1515				5	X		X						X	X	X	X		pH: 6.54
6	FD-[illegible]	WT		[illegible]	1530				5	X		X						X	X	X	X		pH: 5.64
7	EB1			[illegible]	1600				5	X		X						X	X	X	X		—
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	03/04/[illegible]	1605	Charles Hart	3/5/21	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Argyalis
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/04/2021

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

COC6

Section A Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
[illegible], GA 30114
Phone: (770)[illegible] Fax
Requested Due Date:

Section B Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: [illegible]
Project #:

Section C Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]@pacelabs.com
Pace Profile #: [illegible]

Regulatory Agency

State / Location: GA

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

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
13	PZ-37	WT		5-4-21	1155				5	1		1							X	X	X	X		pH-5.51
14		WT																	X	X	X	X		
15		WT																	X	X	X	X		
16		WT																	X	X	X	X		
17		WT																	X	X	X	X		
18		WT																	X	X	X	X		
19		WT																	X	X	X	X		
20		WT																	X	X	X	X		
21																								
22																								
23																								
24																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	5-4-21	[illegible]45	[signature]	5/5/21	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Lipkiewicz
SIGNATURE of SAMPLER: [signature]
DATE Signed: 5-4-21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 5

CoC 2

Section A — Required Client Information:

Company: Georgia Power
Address: 5000 Bridge Mill Ave
[illegible], GA 30114
Phone: (770) [illegible] | Fax:
Requested Due Date:

Section B — Required Project Information:

Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C — Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
13	YGWC-34SA	WT		03/04/24	1150				5	X		X							X	X	X	X		pH = 5.70
14	YGWC-36A	WT		03/04/24	1253				5										X	X	X	X		pH = 5.67
15	~~[illegible]~~ DUP-2	WT		03/04/24	–				5										X	X	X	X		—
16		WT																	~~X~~	~~X~~	~~X~~	~~X~~		—
17		WT																	~~X~~	~~X~~	~~X~~	~~X~~		—
18		WT																	~~X~~	~~X~~	~~X~~	~~X~~		—
19		WT																	~~X~~	~~X~~	~~X~~	~~X~~		—
20		WT																	~~X~~	~~X~~	~~X~~	~~X~~		—
21																								
22																								
23																								
24																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	03/04/24	1606	[signature]	3/5/24	0920	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Peter Aggyakit

SIGNATURE of SAMPLER: [signature] | DATE Signed: 03/04/2024

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 5

COC 2

Section A — Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Canton, GA 30114
Phone: (770) 314-6528 Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10840

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start DATE	Collected Start TIME	Collected End DATE	Collected End TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
13	YGWC-23S	WT		3/4	1215				5	1		1						X	X	X	X		Ph: 5.44
14	[illegible]	WT																X	X	X	X		
15	[illegible]	WT																X	X	X	X		
16		WT																X	X	X	X		
17		WT																X	X	X	X		
18		WT																X	X	X	X		
19		WT																X	X	X	X		
20		WT																X	X	X	X		
21																							
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	Charlie Hanks	3/5/21	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 5
COC A

Section A – Required Client Information:
Company: Georgia Power
Address: 1570 [illegible] Mill Ave
[illegible], GA 30114
Phone: (770)[illegible]
Requested Due Date:

Section B – Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: Yates [illegible]
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start DATE	Collected Start TIME	# OF CONTAINERS	Unpreserved	HNO3	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N) / Notes
1	~~[illegible]~~	WT											
2	~~[illegible]~~	WT							~~X~~	~~X~~	~~X~~	~~X~~	—
3	YGWC-41	WT		3/4	0930	5	✓	✓	X	X	X	X	pH: [illegible] 4.69
4	~~[illegible]~~	WT							X	X	X	X	—
5	YGWC-43	WT		3/4	1450	5	✓	✓	~~X~~	~~X~~	~~X~~	~~X~~	pH: 5.88
6	~~[illegible]~~	WT							X	X	X	X	—
7	FB-1	WT		3/4	1430	5	✓	✓	X	X	X	X	—
8	GB-2	WT		3/4	1655	5	✓	✓	X	X	X	X	
9													
10													
11													
12													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	[signature]	3/5/21	1500	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 4 of 5

COC 2

Section A — Required Client Information:
Company: Georgia Power
Address: [illegible] Mill Ave
[illegible], GA 30114
Email:
Phone: (770) [illegible] Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Plant [illegible]
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
13	[illegible] (struck through)	WT																—	—	—	—	—
14	[illegible] (struck through)	WT																—	—	—	—	—
15	YGWC-49	WT		3-4-21	1451				5	/		/						x	x	x	x	pH: 5.88
16	FB-02	WT		3-4-21	1500				5	/		/						x	x	x	x	—
17		WT																x	x	x	x	
18		WT																x	x	x	x	
19		WT																x	x	x	x	
20		WT																x	x	x	x	
21																						
22																						
23																						
24																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3-4-21	1645	[signature]	3/5/21	0920	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie [illegible]

SIGNATURE of SAMPLER: [signature]

DATE Signed: 3-4-21

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 5 of 5

Section A
Required Client Information:
Company: Georgia Power
Address: 5072 Bridge Mill Ave
Email: [illegible]
Phone: [illegible] Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Shelby Stanner
Copy To:
Purchase Order #:
Project Name: Tolles PM
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kendra.hann-ng@pacelabs.com
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	O, P, SO4	App Gr α Meets	App Gr β Meets	Residual Chlorine (Y/N)
1	[illegible]	WT																				
2	[illegible]	WT																				
3	[illegible]	WT																				
4	TOWC-42	WT		3/28	845				5			/										pH: 5.59
5	[illegible]	WT																				
6	TOWC-38	WT		3/21	1345				5			/										pH: 5.01
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3-4-21	1645	[signature]	3/4/21	1645	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Pepkowski
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3-4-21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 Of 2

COC 6

Section A – Required Client Information:
Company: Georgia Power
Address: 2480 Maner Rd / Bridge Mill Ave [illegible]
[illegible], GA 30[illegible]
Email:
Phone: [illegible] Fax:
Requested Due Date:

Section B – Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: Yates [illegible]
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]@pacelabs.com,
Pace Profile #: [illegible]

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YAMW-2	WT		[illegible]	1410				5	x		x						x	x	x	x		pH: 5.63
2	YAMW-4	WT		[illegible]	1305				5	x		x						x	x	x	x		pH: 6.80
3	YAMW-3	WT		[illegible]	1415				5	x		x						x	x	x	x		pH: 5.52
4	~~[illegible]~~	WT																x	x	x	x		
5	YAMW-1	WT		[illegible]	1515				5	x		x						x	x	x	x		pH: 6.54
6	PZ-32	WT		[illegible]	1530				5	x		x						x	x	x	x		pH: 5.64
7	CB1			[illegible]	1600				5	x		x						x	x	x	x		—
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	03/04/[illegible]	1655	[signature]	3/5/[illegible]	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Argyalis
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/04/2014

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

CCCLo

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email: (770)384-8329 Fax:
Sampled Over Date:

Section B
Required Project Information:
Report To: Becky Steiner
Copy To:
PO/Sales Order #:
Project Name: Yates AMA
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com
Pace Profile #: 10449

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	O, P, Ext	App ion Meters	RAD 9315/9320	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
13	P2-37	WT	G	5/4/21	1155				5	1		1						X	X	X	X		pH-5.51
14		WT																X	X	X	X		
15		WT																X	X	X	X		
16		WT																X	X	X	X		
17		WT																X	X	X	X		
18		WT																X	X	X	X		
19		WT																X	X	X	X		
20		WT																X	X	X	X		
21		WT																X	X	X	X		
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	5/4/21	1445	Charlotte Pace	5/5/21	0900	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Lane Rupkewicz
SIGNATURE of SAMPLER: [signature] DATE Signed: 5-4-21

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

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92525931	YGWC-36A	6020	Lead	0.001	mg/L	UB	EB Contamination
	YGWC-42	6020	Lead	0.001	mg/L	UB	EB Contamination
	YGWC-23S	300	Sulfate	61.7	mg/L	J	MS/MSD Recovery
92525936	YAMW-4	300	Sulfate	91.7	mg/L	J	MS/MSD Recovery
92525896	No Qualifiers Added						
92525905	No Qualifiers Added						

Abbreviations:
mg/L = milligrams per liter

Qualifiers:
UB = not detected due to blank contamination
J/UJ = Estimated

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

March 17, 2021

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

RE: Project: YATES
Pace Project No.: 92525931

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: YATES
Pace Project No.: 92525931

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92525931

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525931001	**YGWC-24SA**	Water	03/03/21 11:50	03/05/21 09:20
92525931002	**YGWC-36A**	Water	03/04/21 12:35	03/05/21 09:20
92525931003	**DUP-2**	Water	03/03/21 00:00	03/05/21 09:20
92525931004	**YGWC-23S**	Water	03/04/21 12:15	03/05/21 09:20
92525931005	**YGWC-41**	Water	03/04/21 09:00	03/05/21 09:20
92525931006	**YGWC-43**	Water	03/04/21 14:50	03/05/21 09:20
92525931007	**FB-1**	Water	03/04/21 14:00	03/05/21 09:20
92525931008	**EB-2**	Water	03/04/21 16:35	03/05/21 09:20
92525931009	**YGWC-49**	Water	03/04/21 14:51	03/05/21 09:20
92525931010	**FB-02**	Water	03/04/21 15:00	03/05/21 09:20
92525931011	**YGWC-42**	Water	03/04/21 08:45	03/05/21 09:20
92525931012	**YGWC-38**	Water	03/04/21 13:45	03/05/21 09:20

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

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525931

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92525931001	**YGWC-24SA**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525931002	**YGWC-36A**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525931003	**DUP-2**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525931004	**YGWC-23S**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931005	**YGWC-41**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931006	**YGWC-43**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931007	**FB-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931008	**EB-2**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525931

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931009	**YGWC-49**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931010	**FB-02**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931011	**YGWC-42**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525931012	**YGWC-38**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3

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

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

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525931

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525931001	**YGWC-24SA**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.70	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	2.4	mg/L	1.0	03/12/21 19:29	
EPA 6020B	Barium	0.025	mg/L	0.0050	03/15/21 17:55	
EPA 6020B	Beryllium	0.000099J	mg/L	0.00050	03/15/21 17:55	
SM 2450C-2011	Total Dissolved Solids	70.0	mg/L	10.0	03/06/21 12:30	
EPA 300.0 Rev 2.1 1993	Chloride	8.6	mg/L	1.0	03/14/21 13:07	
92525931002	**YGWC-36A**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.67	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	5.6	mg/L	1.0	03/12/21 19:34	
EPA 6020B	Antimony	0.0015J	mg/L	0.0030	03/15/21 18:17	
EPA 6020B	Barium	0.028	mg/L	0.0050	03/15/21 18:17	
EPA 6020B	Beryllium	0.00016J	mg/L	0.00050	03/15/21 18:17	
EPA 6020B	Boron	0.0088J	mg/L	0.040	03/15/21 18:17	
EPA 6020B	Lead	0.00025J	mg/L	0.0010	03/15/21 18:17	
SM 2450C-2011	Total Dissolved Solids	69.0	mg/L	10.0	03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	6.6	mg/L	1.0	03/14/21 13:23	
EPA 300.0 Rev 2.1 1993	Sulfate	6.3	mg/L	1.0	03/14/21 13:23	
92525931003	**DUP-2**					
EPA 6010D	Calcium	2.4	mg/L	1.0	03/12/21 19:39	
EPA 6020B	Barium	0.026	mg/L	0.0050	03/15/21 18:23	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	03/15/21 18:23	
SM 2450C-2011	Total Dissolved Solids	63.0	mg/L	10.0	03/06/21 12:30	
EPA 300.0 Rev 2.1 1993	Chloride	8.6	mg/L	1.0	03/14/21 13:38	
92525931004	**YGWC-23S**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.44	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	10.2	mg/L	1.0	03/12/21 19:43	
EPA 6020B	Barium	0.043	mg/L	0.0050	03/15/21 18:29	
EPA 6020B	Beryllium	0.00013J	mg/L	0.00050	03/15/21 18:29	
EPA 6020B	Boron	1.2	mg/L	0.040	03/15/21 18:29	
EPA 6020B	Chromium	0.00078J	mg/L	0.0050	03/15/21 18:29	
EPA 6020B	Lead	0.00021J	mg/L	0.0010	03/15/21 18:29	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	03/15/21 18:29	
EPA 6020B	Selenium	0.037	mg/L	0.0050	03/15/21 18:29	
SM 2450C-2011	Total Dissolved Solids	96.0	mg/L	10.0	03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	03/14/21 22:35	
EPA 300.0 Rev 2.1 1993	Sulfate	61.7	mg/L	1.0	03/14/21 22:35	M1
92525931005	**YGWC-41**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	4.69	Std. Units		03/08/21 09:05	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525931

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525931005	**YGWC-41**					
EPA 6010D	Calcium	16.4	mg/L	1.0	03/12/21 19:48	
EPA 6020B	Barium	0.017	mg/L	0.0050	03/15/21 18:35	
EPA 6020B	Beryllium	0.0015	mg/L	0.00050	03/15/21 18:35	
EPA 6020B	Boron	4.0	mg/L	0.040	03/15/21 18:35	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	03/15/21 18:35	
EPA 6020B	Selenium	0.037	mg/L	0.0050	03/15/21 18:35	
SM 2450C-2011	Total Dissolved Solids	224	mg/L	10.0	03/06/21 12:33	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	03/14/21 23:20	
EPA 300.0 Rev 2.1 1993	Sulfate	117	mg/L	3.0	03/15/21 14:33	
92525931006	**YGWC-43**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.88	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	32.2	mg/L	1.0	03/12/21 19:53	
EPA 6020B	Barium	0.039	mg/L	0.0050	03/15/21 18:52	
EPA 6020B	Beryllium	0.00056	mg/L	0.00050	03/15/21 18:52	
EPA 6020B	Boron	3.6	mg/L	0.040	03/15/21 18:52	
EPA 6020B	Cobalt	0.0015J	mg/L	0.0050	03/15/21 18:52	
EPA 6020B	Lithium	0.025J	mg/L	0.030	03/15/21 18:52	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	03/15/21 18:52	
SM 2450C-2011	Total Dissolved Solids	592	mg/L	10.0	03/06/21 12:33	
EPA 300.0 Rev 2.1 1993	Chloride	2.1	mg/L	1.0	03/14/21 23:35	
EPA 300.0 Rev 2.1 1993	Fluoride	0.063J	mg/L	0.10	03/14/21 23:35	
EPA 300.0 Rev 2.1 1993	Sulfate	328	mg/L	7.0	03/15/21 14:48	
92525931008	**EB-2**					
EPA 6020B	Lead	0.00022J	mg/L	0.0010	03/15/21 19:03	
92525931009	**YGWC-49**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.88	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	13.0	mg/L	1.0	03/12/21 20:17	
EPA 6020B	Barium	0.069	mg/L	0.0050	03/15/21 19:09	
EPA 6020B	Beryllium	0.00010J	mg/L	0.00050	03/15/21 19:09	
EPA 6020B	Chromium	0.0017J	mg/L	0.0050	03/15/21 19:09	
EPA 6020B	Lithium	0.0035J	mg/L	0.030	03/15/21 19:09	
EPA 6020B	Selenium	0.0058	mg/L	0.0050	03/15/21 19:09	
SM 2450C-2011	Total Dissolved Solids	145	mg/L	10.0	03/08/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	03/15/21 01:05	
EPA 300.0 Rev 2.1 1993	Sulfate	75.1	mg/L	1.0	03/15/21 01:05	
92525931011	**YGWC-42**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.59	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	90.7	mg/L	1.0	03/12/21 20:27	
EPA 6020B	Barium	0.030	mg/L	0.0050	03/15/21 19:20	
EPA 6020B	Boron	14.8	mg/L	0.40	03/16/21 16:11	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525931

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525931011	**YGWC-42**					
EPA 6020B	Cobalt	0.0018J	mg/L	0.0050	03/15/21 19:20	
EPA 6020B	Lithium	0.059	mg/L	0.030	03/15/21 19:20	
EPA 6020B	Molybdenum	0.00085J	mg/L	0.010	03/15/21 19:20	
EPA 6020B	Selenium	0.048	mg/L	0.0050	03/15/21 19:20	
SM 2450C-2011	Total Dissolved Solids	501	mg/L	10.0	03/08/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	03/15/21 01:35	
EPA 300.0 Rev 2.1 1993	Sulfate	537	mg/L	12.0	03/15/21 15:02	
92525931012	**YGWC-38**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.01	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	87.0	mg/L	1.0	03/12/21 20:31	
EPA 6020B	Barium	0.016	mg/L	0.0050	03/15/21 19:26	
EPA 6020B	Beryllium	0.0029	mg/L	0.00050	03/15/21 19:26	
EPA 6020B	Boron	6.4	mg/L	0.040	03/15/21 19:26	
EPA 6020B	Cadmium	0.0013	mg/L	0.00050	03/15/21 19:26	
EPA 6020B	Lithium	0.0067J	mg/L	0.030	03/15/21 19:26	
EPA 6020B	Selenium	0.076	mg/L	0.0050	03/15/21 19:26	
SM 2450C-2011	Total Dissolved Solids	600	mg/L	20.0	03/08/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	3.9	mg/L	1.0	03/15/21 01:50	
EPA 300.0 Rev 2.1 1993	Sulfate	356	mg/L	8.0	03/15/21 15:17	

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-24SA **Lab ID: 92525931001** Collected: 03/03/21 11:50 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.70**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.4**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 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	0.00028	1	03/12/21 11:07	03/15/21 17:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 17:55	7440-38-2	
Barium	**0.025**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 17:55	7440-39-3	
Beryllium	**0.000099J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 17:55	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 17:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 17:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 17:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 17:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 17:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 17:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 17:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 17:55	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 11:56	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**70.0**	mg/L	10.0	10.0	1		03/06/21 12:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.6**	mg/L	1.0	0.60	1		03/14/21 13:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 13:07	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/14/21 13:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-36A **Lab ID: 92525931002** Collected: 03/04/21 12:35 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.67**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.6**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 19:34	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0015J**	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 18:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 18:17	7440-38-2	
Barium	**0.028**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 18:17	7440-39-3	
Beryllium	**0.00016J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 18:17	7440-41-7	
Boron	**0.0088J**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 18:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 18:17	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 18:17	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 18:17	7440-48-4	
Lead	**0.00025J**	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 18:17	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 18:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 18:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 18:17	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 11:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**69.0**	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.6**	mg/L	1.0	0.60	1		03/14/21 13:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 13:23	16984-48-8	
Sulfate	**6.3**	mg/L	1.0	0.50	1		03/14/21 13:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: DUP-2 **Lab ID: 92525931003** Collected: 03/03/21 00:00 Received: 03/05/21 09:20 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	**2.4**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 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	0.00028	1	03/12/21 11:07	03/15/21 18:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 18:23	7440-38-2	
Barium	**0.026**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 18:23	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 18:23	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 18:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 18:23	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 18:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 18:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 18:23	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 18:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 18:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 18:23	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:01	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**63.0**	mg/L	10.0	10.0	1		03/06/21 12:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.6**	mg/L	1.0	0.60	1		03/14/21 13:38	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 13:38	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/14/21 13:38	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-23S **Lab ID: 92525931004** Collected: 03/04/21 12:15 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.44**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**10.2**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 19:43	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 18:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 18:29	7440-38-2	
Barium	**0.043**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 18:29	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 18:29	7440-41-7	
Boron	**1.2**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 18:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 18:29	7440-43-9	
Chromium	**0.00078J**	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 18:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 18:29	7440-48-4	
Lead	**0.00021J**	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 18:29	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 18:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 18:29	7439-98-7	
Selenium	**0.037**	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 18:29	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:03	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**96.0**	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.8**	mg/L	1.0	0.60	1		03/14/21 22:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 22:35	16984-48-8	M1
Sulfate	**61.7**	mg/L	1.0	0.50	1		03/14/21 22:35	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-41 **Lab ID: 92525931005** Collected: 03/04/21 09:00 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**4.69**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**16.4**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 19:48	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	0.00028	1	03/12/21 11:07	03/15/21 18:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 18:35	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 18:35	7440-39-3	
Beryllium	**0.0015**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 18:35	7440-41-7	
Boron	**4.0**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 18:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 18:35	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 18:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 18:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 18:35	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 18:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 18:35	7439-98-7	
Selenium	**0.037**	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 18:35	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:06	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**224**	mg/L	10.0	10.0	1		03/06/21 12:33		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.4**	mg/L	1.0	0.60	1		03/14/21 23:20	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 23:20	16984-48-8	
Sulfate	**117**	mg/L	3.0	1.5	3		03/15/21 14:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-43 **Lab ID: 92525931006** Collected: 03/04/21 14:50 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.88**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**32.2**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 19:53	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	0.00028	1	03/12/21 11:07	03/15/21 18:52	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 18:52	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 18:52	7440-39-3	
Beryllium	**0.00056**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 18:52	7440-41-7	
Boron	**3.6**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 18:52	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 18:52	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 18:52	7440-47-3	
Cobalt	**0.0015J**	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 18:52	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 18:52	7439-92-1	
Lithium	**0.025J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 18:52	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 18:52	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 18:52	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:08	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**592**	mg/L	10.0	10.0	1		03/06/21 12:33		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.1**	mg/L	1.0	0.60	1		03/14/21 23:35	16887-00-6	
Fluoride	**0.063J**	mg/L	0.10	0.050	1		03/14/21 23:35	16984-48-8	
Sulfate	**328**	mg/L	7.0	3.5	7		03/15/21 14:48	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: FB-1 **Lab ID: 92525931007** Collected: 03/04/21 14:00 Received: 03/05/21 09:20 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	0.070	1	03/12/21 11:05	03/12/21 20:07	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	0.00028	1	03/12/21 11:07	03/15/21 18:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 18:58	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 18:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 18:58	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 18:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 18:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 18:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 18:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 18:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 18:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 18:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 18:58	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:10	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/08/21 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		03/14/21 23:50	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/14/21 23:50	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/14/21 23:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: EB-2 **Lab ID: 92525931008** Collected: 03/04/21 16:35 Received: 03/05/21 09:20 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	0.070	1	03/12/21 11:05	03/12/21 20:12	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	0.00028	1	03/12/21 11:07	03/15/21 19:03	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:03	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:03	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:03	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 19:03	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:03	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:03	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:03	7440-48-4	
Lead	**0.00022J**	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:03	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:03	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:03	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:03	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/08/21 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		03/15/21 00:50	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 00:50	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/15/21 00:50	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-49 **Lab ID: 92525931009** Collected: 03/04/21 14:51 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.88**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**13.0**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 20:17	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 19:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:09	7440-38-2	
Barium	**0.069**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:09	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:09	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 19:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:09	7440-43-9	
Chromium	**0.0017J**	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:09	7439-92-1	
Lithium	**0.0035J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:09	7439-98-7	
Selenium	**0.0058**	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:09	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**145**	mg/L	10.0	10.0	1		03/08/21 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.1**	mg/L	1.0	0.60	1		03/15/21 01:05	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 01:05	16984-48-8	
Sulfate	**75.1**	mg/L	1.0	0.50	1		03/15/21 01:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: FB-02 **Lab ID: 92525931010** Collected: 03/04/21 15:00 Received: 03/05/21 09:20 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	0.070	1	03/12/21 11:05	03/12/21 20:22	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	0.00028	1	03/12/21 11:07	03/15/21 19:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:15	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:15	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 19:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:15	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:15	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/10/21 13:05	03/11/21 12:25	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/08/21 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		03/15/21 01:20	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 01:20	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/15/21 01:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-42 **Lab ID: 92525931011** Collected: 03/04/21 08:45 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.59**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**90.7**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 20:27	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 19:20	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:20	7440-38-2	
Barium	**0.030**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:20	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:20	7440-41-7	
Boron	**14.8**	mg/L	0.40	0.052	10	03/12/21 11:07	03/16/21 16:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:20	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:20	7440-47-3	
Cobalt	**0.0018J**	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:20	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:20	7439-92-1	
Lithium	**0.059**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:20	7439-93-2	
Molybdenum	**0.00085J**	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:20	7439-98-7	
Selenium	**0.048**	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:20	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:29	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**501**	mg/L	10.0	10.0	1		03/08/21 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.7**	mg/L	1.0	0.60	1		03/15/21 01:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 01:35	16984-48-8	
Sulfate	**537**	mg/L	12.0	6.0	12		03/15/21 15:02	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525931

Sample: YGWC-38 **Lab ID: 92525931012** Collected: 03/04/21 13:45 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.01**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**87.0**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 20:31	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	0.00028	1	03/12/21 11:07	03/15/21 19:26	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:26	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:26	7440-39-3	
Beryllium	**0.0029**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:26	7440-41-7	
Boron	**6.4**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 19:26	7440-42-8	
Cadmium	**0.0013**	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:26	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:26	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:26	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:26	7439-92-1	
Lithium	**0.0067J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:26	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:26	7439-98-7	
Selenium	**0.076**	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:26	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:38	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**600**	mg/L	20.0	20.0	1		03/08/21 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.9**	mg/L	1.0	0.60	1		03/15/21 01:50	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 01:50	16984-48-8	
Sulfate	**356**	mg/L	8.0	4.0	8		03/15/21 15:17	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 606033 — Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A — Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

METHOD BLANK: 3192886 — Matrix: Water
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/12/21 19:19	

LABORATORY CONTROL SAMPLE: 3192887

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	111	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192890 3192891

Parameter	Units	92525936001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1.5	1	1	2.6	2.6	107	111	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 606045
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

METHOD BLANK: 3193005 Matrix: Water
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/15/21 17:43	
Arsenic	mg/L	ND	0.0050	0.00078	03/15/21 17:43	
Barium	mg/L	ND	0.0050	0.00071	03/15/21 17:43	
Beryllium	mg/L	ND	0.00050	0.000046	03/15/21 17:43	
Boron	mg/L	ND	0.040	0.0052	03/15/21 17:43	
Cadmium	mg/L	ND	0.00050	0.00012	03/15/21 17:43	
Chromium	mg/L	ND	0.0050	0.00055	03/15/21 17:43	
Cobalt	mg/L	ND	0.0050	0.00038	03/15/21 17:43	
Lead	mg/L	ND	0.0010	0.000036	03/15/21 17:43	
Lithium	mg/L	ND	0.030	0.00081	03/15/21 17:43	
Molybdenum	mg/L	ND	0.010	0.00069	03/15/21 17:43	
Selenium	mg/L	ND	0.0050	0.0016	03/15/21 17:43	

LABORATORY CONTROL SAMPLE: 3193006

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	109	80-120	
Cadmium	mg/L	0.1	0.11	105	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.11	105	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193007 3193008

Parameter	Units	92525931001 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	103	104	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20	
Barium	mg/L	0.025	0.1	0.1	0.13	0.13	100	101	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193007 3193008

Parameter	Units	92525931001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	0.000099J	0.1	0.1	0.097	0.096	97	96	75-125	1	20	
Boron	mg/L	ND	1	1	0.98	0.97	98	97	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.10	106	105	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	101	99	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.099	97	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	104	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 605556
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010

METHOD BLANK: 3190111 Matrix: Water
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/11/21 11:23	

LABORATORY CONTROL SAMPLE: 3190112

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3190113 3190114

Parameter	Units	92526541001 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	0.0024	91	94	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 605942
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525931011, 92525931012

METHOD BLANK: 3192294 Matrix: Water
Associated Lab Samples: 92525931011, 92525931012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/12/21 09:24	

LABORATORY CONTROL SAMPLE: 3192295

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192296 3192297

Parameter	Units	92525931011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	97	97	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 604765 Analysis Method: SM 2450C-2011
QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006

METHOD BLANK: 3186310 Matrix: Water
Associated Lab Samples: 92525931001, 92525931002, 92525931003, 92525931004, 92525931005, 92525931006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/06/21 12:29	

LABORATORY CONTROL SAMPLE: 3186311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	371	93	90-111	

SAMPLE DUPLICATE: 3186312

Parameter	Units	92525346009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	217	220	1	10	

SAMPLE DUPLICATE: 3186313

Parameter	Units	92525824003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	45.0	61.0	30	10	D6

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 604895 Analysis Method: SM 2450C-2011
QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

METHOD BLANK: 3186921 Matrix: Water
Associated Lab Samples: 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/08/21 11:05	

LABORATORY CONTROL SAMPLE: 3186922

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3186923

Parameter	Units	92526103001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	154	311	68	10	D6

SAMPLE DUPLICATE: 3186924

Parameter	Units	92525936007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	856	878	3	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 606456
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: 92525931001, 92525931002, 92525931003

METHOD BLANK: 3195140 Matrix: Water
Associated Lab Samples: 92525931001, 92525931002, 92525931003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 20:29	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 20:29	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 20:29	

LABORATORY CONTROL SAMPLE: 3195141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.5	97	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195142 3195143

Parameter	Units	92525335019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.99J	50	50	52.8	52.3	104	103	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	106	104	90-110	2	10	
Sulfate	mg/L	9.6	50	50	65.5	64.7	112	110	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195144 3195145

Parameter	Units	92525346005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.6	50	50	66.4	68.7	100	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	103	90-110	5	10	
Sulfate	mg/L	88.8	50	50	115	117	53	56	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525931

QC Batch: 606496
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: 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

METHOD BLANK: 3195315 Matrix: Water
Associated Lab Samples: 92525931004, 92525931005, 92525931006, 92525931007, 92525931008, 92525931009, 92525931010, 92525931011, 92525931012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/14/21 21:28	
Fluoride	mg/L	ND	0.10	0.050	03/14/21 21:28	
Sulfate	mg/L	ND	1.0	0.50	03/14/21 21:28	

LABORATORY CONTROL SAMPLE: 3195316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.5	93	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	50	46.8	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195317 3195318

Parameter	Units	92525931004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.8	50	50	50.1	49.8	97	96	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.8	111	111	90-110	0	10	M1
Sulfate	mg/L	61.7	50	50	98.6	98.0	74	73	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195319 3195320

Parameter	Units	92525936002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	22.9	50	50	67.6	70.1	89	94	90-110	4	10	M1
Fluoride	mg/L	0.14	2.5	2.5	2.4	2.6	91	97	90-110	6	10	
Sulfate	mg/L	91.7	50	50	126	124	70	65	90-110	2	10	M1

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REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES
Pace Project No.: 92525931

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525931

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525931001	**YGWC-24SA**				
92525931002	**YGWC-36A**				
92525931004	**YGWC-23S**				
92525931005	**YGWC-41**				
92525931006	**YGWC-43**				
92525931009	**YGWC-49**				
92525931011	**YGWC-42**				
92525931012	**YGWC-38**				
92525931001	**YGWC-24SA**	EPA 3010A	606033	EPA 6010D	606330
92525931002	**YGWC-36A**	EPA 3010A	606033	EPA 6010D	606330
92525931003	**DUP-2**	EPA 3010A	606033	EPA 6010D	606330
92525931004	**YGWC-23S**	EPA 3010A	606033	EPA 6010D	606330
92525931005	**YGWC-41**	EPA 3010A	606033	EPA 6010D	606330
92525931006	**YGWC-43**	EPA 3010A	606033	EPA 6010D	606330
92525931007	**FB-1**	EPA 3010A	606033	EPA 6010D	606330
92525931008	**EB-2**	EPA 3010A	606033	EPA 6010D	606330
92525931009	**YGWC-49**	EPA 3010A	606033	EPA 6010D	606330
92525931010	**FB-02**	EPA 3010A	606033	EPA 6010D	606330
92525931011	**YGWC-42**	EPA 3010A	606033	EPA 6010D	606330
92525931012	**YGWC-38**	EPA 3010A	606033	EPA 6010D	606330
92525931001	**YGWC-24SA**	EPA 3005A	606045	EPA 6020B	606338
92525931002	**YGWC-36A**	EPA 3005A	606045	EPA 6020B	606338
92525931003	**DUP-2**	EPA 3005A	606045	EPA 6020B	606338
92525931004	**YGWC-23S**	EPA 3005A	606045	EPA 6020B	606338
92525931005	**YGWC-41**	EPA 3005A	606045	EPA 6020B	606338
92525931006	**YGWC-43**	EPA 3005A	606045	EPA 6020B	606338
92525931007	**FB-1**	EPA 3005A	606045	EPA 6020B	606338
92525931008	**EB-2**	EPA 3005A	606045	EPA 6020B	606338
92525931009	**YGWC-49**	EPA 3005A	606045	EPA 6020B	606338
92525931010	**FB-02**	EPA 3005A	606045	EPA 6020B	606338
92525931011	**YGWC-42**	EPA 3005A	606045	EPA 6020B	606338
92525931012	**YGWC-38**	EPA 3005A	606045	EPA 6020B	606338
92525931001	**YGWC-24SA**	EPA 7470A	605556	EPA 7470A	605621
92525931002	**YGWC-36A**	EPA 7470A	605556	EPA 7470A	605621
92525931003	**DUP-2**	EPA 7470A	605556	EPA 7470A	605621
92525931004	**YGWC-23S**	EPA 7470A	605556	EPA 7470A	605621
92525931005	**YGWC-41**	EPA 7470A	605556	EPA 7470A	605621
92525931006	**YGWC-43**	EPA 7470A	605556	EPA 7470A	605621
92525931007	**FB-1**	EPA 7470A	605556	EPA 7470A	605621
92525931008	**EB-2**	EPA 7470A	605556	EPA 7470A	605621
92525931009	**YGWC-49**	EPA 7470A	605556	EPA 7470A	605621
92525931010	**FB-02**	EPA 7470A	605556	EPA 7470A	605621
92525931011	**YGWC-42**	EPA 7470A	605942	EPA 7470A	606185
92525931012	**YGWC-38**	EPA 7470A	605942	EPA 7470A	606185
92525931001	**YGWC-24SA**	SM 2450C-2011	604765		
92525931002	**YGWC-36A**	SM 2450C-2011	604765		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525931

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525931003	**DUP-2**	SM 2450C-2011	604765		
92525931004	**YGWC-23S**	SM 2450C-2011	604765		
92525931005	**YGWC-41**	SM 2450C-2011	604765		
92525931006	**YGWC-43**	SM 2450C-2011	604765		
92525931007	**FB-1**	SM 2450C-2011	604895		
92525931008	**EB-2**	SM 2450C-2011	604895		
92525931009	**YGWC-49**	SM 2450C-2011	604895		
92525931010	**FB-02**	SM 2450C-2011	604895		
92525931011	**YGWC-42**	SM 2450C-2011	604895		
92525931012	**YGWC-38**	SM 2450C-2011	604895		
92525931001	**YGWC-24SA**	EPA 300.0 Rev 2.1 1993	606456		
92525931002	**YGWC-36A**	EPA 300.0 Rev 2.1 1993	606456		
92525931003	**DUP-2**	EPA 300.0 Rev 2.1 1993	606456		
92525931004	**YGWC-23S**	EPA 300.0 Rev 2.1 1993	606496		
92525931005	**YGWC-41**	EPA 300.0 Rev 2.1 1993	606496		
92525931006	**YGWC-43**	EPA 300.0 Rev 2.1 1993	606496		
92525931007	**FB-1**	EPA 300.0 Rev 2.1 1993	606496		
92525931008	**EB-2**	EPA 300.0 Rev 2.1 1993	606496		
92525931009	**YGWC-49**	EPA 300.0 Rev 2.1 1993	606496		
92525931010	**FB-02**	EPA 300.0 Rev 2.1 1993	606496		
92525931011	**YGWC-42**	EPA 300.0 Rev 2.1 1993	606496		
92525931012	**YGWC-38**	EPA 300.0 Rev 2.1 1993	606496		

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

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92525931**

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

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

Date/Initials Person Examining Contents: 3/5/21 DF

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

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

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

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C): +0.0 Type of Ice:

Cooler Temp Corrected (°C): 2.0

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

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority:

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

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

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

Project # WO# : 92525931

PM: KLH1 Due Date: 03/19/21

CLIENT: GR-GR Power

Items	BP6U-125 mL Plastic Unpreserved (N/A) (O)	BP3U-250 mL Plastic Unpreserved (N/A)	BP3U-500 mL Plastic Unpreserved (N/A)	BP1S-1 liter Plastic Unpreserved (N/A)	BP6Z-125 mL Plastic H2SO4 (pH < 2) (O)	BP3N-250 mL Plastic HNO3 (pH < 2)	BP2Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP6C-125 mL Plastic NaOH (pH > 12) (O)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (O)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (O)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3H-250 mL Amber H2SO4 (pH < 2)	AG3AM50M3M-250 mL Amber NH4Cl (N/A)(O)	DG9H-40 mL VOA HCl (N/A)	DG9HB-40 mL VOA NaHSO4 (N/A)	DG9S-40 mL VOA H2SO4 (N/A)	DG9B-40 mL VOA NaOH (N/A)	VG9H-40 mL VOA HCl (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	VG9A-40 mL VOA NH4Cl (N/A)	DG9T-40 mL VOA Na2S2O3 (N/A)	BP3B-250 mL Plastic NaOH (pH > 12)	BP4U-125 mL Unpreserved (N/A)	AG0U-100 mL Amber Unpreserved (N/A)	VG9U-22 mL Unpreserved (N/A)	DG9U-40 mL Unpreserved (N/A)
1																									N/A			
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 5

CoC 2

Section A — Required Client Information:
Company: Georgia Power
Address: 5000 Bridge Mill Ave
[illegible], GA 30114
Email:
Phone: [illegible] Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
13	[illegible]	WT		[illegible]	1150				5	X		X						X	X	X	X		pH = 5.70
14	[illegible]	WT		[illegible]	1253				5									X	X	X	X		pH = 5.67
15	~~[illegible]~~ DUP-2	WT		[illegible]	-				5									X	X	X	X		—
16		WT																~~X~~	~~X~~	~~X~~	~~X~~		—
17		WT																~~X~~	~~X~~	~~X~~	~~X~~		—
18		WT																~~X~~	~~X~~	~~X~~	~~X~~		—
19		WT																~~X~~	~~X~~	~~X~~	~~X~~		—
20		WT																~~X~~	~~X~~	~~X~~	~~X~~		—
21																							
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	03/04/24	1606	[signature]	3/5/24	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Angyalus
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/04/2024

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 5

COC 2

Section A — Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Canton, GA 30114
Phone: (770) 334-6526

Section B — Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

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

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
13	[struck through] YGWC-23S	WT		3/4	1215				5	1		1						X	X	X	X	Ph: 5.44
14	[struck through]	WT																~~X~~	~~X~~	~~X~~	~~X~~	—
15	[struck through]	WT																~~X~~	~~X~~	~~X~~	~~X~~	—
16		WT																X	X	X	X	
17		WT																X	X	X	X	
18		WT																X	X	X	X	
19		WT																X	X	X	X	
20		WT																X	X	X	X	
21																						
22																						
23																						
24																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	Charlie Hauls	3/5/21	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page : 3 of 5
COC A

Section A — Required Client Information: Company: Georgia Power; Phone: (770) 384-[illegible]

Section B — Required Project Information: Report To: [illegible]; Project Name: Yates [illegible]

Section C — Invoice Information: Pace Project Manager: [illegible]

ITEM #	SAMPLE ID	MATRIX CODE	DATE	TIME	# OF CONTAINERS	Unpreserved	HNO3	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Sample notes
1	[illegible] (struck through)	WT										
2	[illegible] (struck through)	WT										—
3	YGWC-41	WT	3/4	0930	5	✓	✓	X	X	X	X	PH: [illegible] 4.69
4	[illegible] (struck through)	WT										—
5	YGWC-43	WT	3/4	1450	5	✓	✓	X	X	X	X	PH: 5.88
6	[illegible] (struck through)	WT										—
7	FB-1	WT	3/4	1430	5	✓	✓	X	X	X	X	—
8	GB-2	WT	3/4	1655	5	✓	✓	X	X	X	X	
9												
10												
11												
12												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	[illegible signature]	3/5/21	1500	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 4 of 5

COC 8

Section A — Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
[illegible], GA 30114
Email:
Phone: (770) 384-[illegible] Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Becky Steever?
Copy To:
Purchase Order #:
Project Name: Yates AAB?
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: 10869?

Regulatory Agency
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
13	[illegible]	WT																—	—	—	—	—
14	[illegible]	WT																—	—	—	—	—
15	YGWC-49?	WT		3-4-21	1451				5	/		/						x	x	x	x	pH: 5.88
16	FB-02	WT		3-4-21	1500				5	/		/						x	x	x	x	—
17		WT																x	x	x	x	
18		WT																x	x	x	x	
19		WT																x	x	x	x	
20		WT																x	x	x	x	
21																						
22																						
23																						
24																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3-4-21	1645	[signature]	3/5/21	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Zyskiewicz?
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3-4-21

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 5 of 5

Section A
Required Client Information:
Company: Georgia Power
Address: 5072 Bridge Mill Ave
Email: [illegible]
Phone: [illegible] Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Shelby Stanner
Copy To:
Purchase Order #:
Project Name: Tolles PM
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kendra.hann-ng@pacelabs.com
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	O, P, SO4	App Gr α Meets	App Gr β Meets	Residual Chlorine (Y/N)
1	[illegible]	WT																				
2	[illegible]	WT																				
3	[illegible]	WT																				
4	TOWC-42	WT		3/28	845				5			/										pH: 5.59
5	[illegible]	WT																				
6	TOWC-38	WT		3/21	1345				5			/										pH: 5.01
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3-4-21	1645	[signature]	3/4/21	1645	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Pepkowski
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3-4-21

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

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

March 17, 2021

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

RE: Project: YATES
Pace Project No.: 92525936

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

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

Sincerely,

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

Enclosures

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

REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: YATES
Pace Project No.: 92525936

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

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

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92525936

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525936001	**YAMW-2**	Water	03/03/21 14:10	03/05/21 09:20
92525936002	**YAMW-4**	Water	03/03/21 13:05	03/05/21 09:20
92525936003	**YAMW-5**	Water	03/04/21 14:15	03/05/21 09:20
92525936004	**YAMW-1**	Water	03/03/21 15:15	03/05/21 09:20
92525936005	**PZ-35**	Water	03/04/21 15:30	03/05/21 09:20
92525936006	**EB1**	Water	03/04/21 16:00	03/05/21 09:20
92525936007	**PZ-37**	Water	03/04/21 11:55	03/05/21 09:20

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

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525936

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92525936001	**YAMW-2**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525936002	**YAMW-4**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525936003	**YAMW-5**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525936004	**YAMW-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525936005	**PZ-35**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525936006	**EB1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525936007	**PZ-37**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525936

Lab ID	Sample ID	Method	Analysts	Analytes Reported

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

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

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525936

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525936001	**YAMW-2**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.67	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	1.5	mg/L	1.0	03/12/21 20:36	
EPA 6020B	Barium	0.0082	mg/L	0.0050	03/15/21 19:32	
EPA 6020B	Boron	0.032J	mg/L	0.040	03/15/21 19:32	
EPA 6020B	Chromium	0.0012J	mg/L	0.0050	03/15/21 19:32	
EPA 6020B	Cobalt	0.00082J	mg/L	0.0050	03/15/21 19:32	
EPA 6020B	Lead	0.000080J	mg/L	0.0010	03/15/21 19:32	
SM 2450C-2011	Total Dissolved Solids	40.0	mg/L	10.0	03/06/21 12:30	
EPA 300.0 Rev 2.1 1993	Chloride	2.5	mg/L	1.0	03/15/21 02:05	
EPA 300.0 Rev 2.1 1993	Sulfate	7.9	mg/L	1.0	03/15/21 02:05	
92525936002	**YAMW-4**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	6.80	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	20.6	mg/L	1.0	03/12/21 21:05	
EPA 6020B	Antimony	0.00062J	mg/L	0.0030	03/15/21 19:38	
EPA 6020B	Arsenic	0.00079J	mg/L	0.0050	03/15/21 19:38	
EPA 6020B	Barium	0.021	mg/L	0.0050	03/15/21 19:38	
EPA 6020B	Boron	0.81	mg/L	0.040	03/15/21 19:38	
EPA 6020B	Cobalt	0.0010J	mg/L	0.0050	03/15/21 19:38	
EPA 6020B	Lead	0.000096J	mg/L	0.0010	03/15/21 19:38	
EPA 6020B	Lithium	0.020J	mg/L	0.030	03/15/21 19:38	
EPA 6020B	Molybdenum	0.0049J	mg/L	0.010	03/15/21 19:38	
SM 2450C-2011	Total Dissolved Solids	245	mg/L	10.0	03/06/21 12:30	
EPA 300.0 Rev 2.1 1993	Chloride	22.9	mg/L	1.0	03/15/21 02:20	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.14	mg/L	0.10	03/15/21 02:20	
EPA 300.0 Rev 2.1 1993	Sulfate	91.7	mg/L	1.0	03/15/21 02:20	M1
92525936003	**YAMW-5**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.32	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	53.8	mg/L	1.0	03/12/21 21:10	
EPA 6020B	Barium	0.039	mg/L	0.0050	03/15/21 19:43	
EPA 6020B	Beryllium	0.00013J	mg/L	0.00050	03/15/21 19:43	
EPA 6020B	Boron	6.1	mg/L	0.040	03/15/21 19:43	
EPA 6020B	Cadmium	0.00018J	mg/L	0.00050	03/15/21 19:43	
EPA 6020B	Lead	0.000041J	mg/L	0.0010	03/15/21 19:43	
EPA 6020B	Lithium	0.016J	mg/L	0.030	03/15/21 19:43	
EPA 6020B	Selenium	0.061	mg/L	0.0050	03/15/21 19:43	
SM 2450C-2011	Total Dissolved Solids	604	mg/L	20.0	03/08/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	3.7	mg/L	1.0	03/15/21 03:04	
EPA 300.0 Rev 2.1 1993	Sulfate	340	mg/L	8.0	03/15/21 16:46	
92525936004	**YAMW-1**					
	Performed by	CUSTOMER			03/08/21 09:05	

REPORT OF LABORATORY ANALYSIS

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

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525936

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525936004	**YAMW-1**					
	pH	6.54	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	6.9	mg/L	1.0	03/12/21 21:15	
EPA 6020B	Antimony	0.025	mg/L	0.0030	03/15/21 20:00	
EPA 6020B	Barium	0.035	mg/L	0.0050	03/15/21 20:00	
EPA 6020B	Boron	0.039J	mg/L	0.040	03/15/21 20:00	
EPA 6020B	Chromium	0.00076J	mg/L	0.0050	03/15/21 20:00	
EPA 6020B	Cobalt	0.018	mg/L	0.0050	03/15/21 20:00	
EPA 6020B	Lithium	0.022J	mg/L	0.030	03/15/21 20:00	
EPA 6020B	Molybdenum	0.0037J	mg/L	0.010	03/15/21 20:00	
SM 2450C-2011	Total Dissolved Solids	121	mg/L	10.0	03/06/21 12:30	
EPA 300.0 Rev 2.1 1993	Chloride	6.1	mg/L	1.0	03/15/21 03:49	
EPA 300.0 Rev 2.1 1993	Sulfate	16.9	mg/L	1.0	03/15/21 03:49	
92525936005	**PZ-35**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.64	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	4.4	mg/L	1.0	03/12/21 21:20	
EPA 6020B	Antimony	0.00039J	mg/L	0.0030	03/15/21 20:06	
EPA 6020B	Barium	0.033	mg/L	0.0050	03/15/21 20:06	
EPA 6020B	Beryllium	0.00025J	mg/L	0.00050	03/15/21 20:06	
EPA 6020B	Boron	0.012J	mg/L	0.040	03/15/21 20:06	
EPA 6020B	Chromium	0.00070J	mg/L	0.0050	03/15/21 20:06	
EPA 6020B	Lead	0.00015J	mg/L	0.0010	03/15/21 20:06	
EPA 6020B	Lithium	0.0015J	mg/L	0.030	03/15/21 20:06	
SM 2450C-2011	Total Dissolved Solids	59.0	mg/L	10.0	03/08/21 11:06	
EPA 300.0 Rev 2.1 1993	Chloride	6.7	mg/L	1.0	03/15/21 04:04	
EPA 300.0 Rev 2.1 1993	Sulfate	8.8	mg/L	1.0	03/15/21 04:04	
92525936007	**PZ-37**					
	Performed by	CUSTOMER			03/08/21 09:05	
	pH	5.51	Std. Units		03/08/21 09:05	
EPA 6010D	Calcium	118	mg/L	1.0	03/12/21 21:29	
EPA 6020B	Barium	0.036	mg/L	0.0050	03/15/21 20:18	
EPA 6020B	Beryllium	0.00017J	mg/L	0.00050	03/15/21 20:18	
EPA 6020B	Boron	12.4	mg/L	0.40	03/16/21 16:17	
EPA 6020B	Cadmium	0.00028J	mg/L	0.00050	03/15/21 20:18	
EPA 6020B	Cobalt	0.0030J	mg/L	0.0050	03/15/21 20:18	
EPA 6020B	Lithium	0.028J	mg/L	0.030	03/15/21 20:18	
EPA 6020B	Molybdenum	0.0024J	mg/L	0.010	03/15/21 20:18	
EPA 6020B	Selenium	0.27	mg/L	0.0050	03/15/21 20:18	
SM 2450C-2011	Total Dissolved Solids	856	mg/L	20.0	03/08/21 11:07	
EPA 300.0 Rev 2.1 1993	Chloride	3.9	mg/L	1.0	03/15/21 04:34	
EPA 300.0 Rev 2.1 1993	Sulfate	485	mg/L	11.0	03/15/21 17:00	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525936

Sample: YAMW-2 **Lab ID: 92525936001** Collected: 03/03/21 14:10 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.67**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.5**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 20:36	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 19:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:32	7440-38-2	
Barium	**0.0082**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:32	7440-41-7	
Boron	**0.032J**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 19:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:32	7440-43-9	
Chromium	**0.0012J**	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:32	7440-47-3	
Cobalt	**0.00082J**	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:32	7440-48-4	
Lead	**0.000080J**	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:32	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:41	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**40.0**	mg/L	10.0	10.0	1		03/06/21 12:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.5**	mg/L	1.0	0.60	1		03/15/21 02:05	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 02:05	16984-48-8	
Sulfate	**7.9**	mg/L	1.0	0.50	1		03/15/21 02:05	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525936

Sample: YAMW-4 **Lab ID: 92525936002** Collected: 03/03/21 13:05 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**6.80**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**20.6**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 21:05	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00062J**	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 19:38	7440-36-0	
Arsenic	**0.00079J**	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:38	7440-38-2	
Barium	**0.021**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:38	7440-41-7	
Boron	**0.81**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 19:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:38	7440-47-3	
Cobalt	**0.0010J**	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:38	7440-48-4	
Lead	**0.000096J**	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:38	7439-92-1	
Lithium	**0.020J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:38	7439-93-2	
Molybdenum	**0.0049J**	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:38	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**245**	mg/L	10.0	10.0	1		03/06/21 12:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**22.9**	mg/L	1.0	0.60	1		03/15/21 02:20	16887-00-6	M1
Fluoride	**0.14**	mg/L	0.10	0.050	1		03/15/21 02:20	16984-48-8	
Sulfate	**91.7**	mg/L	1.0	0.50	1		03/15/21 02:20	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525936

Sample: YAMW-5 **Lab ID: 92525936003** Collected: 03/04/21 14:15 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.32**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**53.8**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 21:10	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	0.00028	1	03/12/21 11:07	03/15/21 19:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 19:43	7440-38-2	
Barium	**0.039**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 19:43	7440-39-3	
Beryllium	**0.00013J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 19:43	7440-41-7	
Boron	**6.1**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 19:43	7440-42-8	
Cadmium	**0.00018J**	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 19:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 19:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 19:43	7440-48-4	
Lead	**0.000041J**	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 19:43	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 19:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 19:43	7439-98-7	
Selenium	**0.061**	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 19:43	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**604**	mg/L	20.0	20.0	1		03/08/21 11:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.7**	mg/L	1.0	0.60	1		03/15/21 03:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 03:04	16984-48-8	
Sulfate	**340**	mg/L	8.0	4.0	8		03/15/21 16:46	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525936

Sample: YAMW-1 **Lab ID: 92525936004** Collected: 03/03/21 15:15 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**6.54**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**6.9**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 21:15	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.025**	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 20:00	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 20:00	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 20:00	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 20:00	7440-41-7	
Boron	**0.039J**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 20:00	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 20:00	7440-43-9	
Chromium	**0.00076J**	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 20:00	7440-47-3	
Cobalt	**0.018**	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 20:00	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 20:00	7439-92-1	
Lithium	**0.022J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 20:00	7439-93-2	
Molybdenum	**0.0037J**	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 20:00	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 20:00	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**121**	mg/L	10.0	10.0	1		03/06/21 12:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.1**	mg/L	1.0	0.60	1		03/15/21 03:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 03:49	16984-48-8	
Sulfate	**16.9**	mg/L	1.0	0.50	1		03/15/21 03:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525936

Sample: PZ-35 **Lab ID: 92525936005** Collected: 03/04/21 15:30 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.64**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**4.4**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 21:20	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00039J**	mg/L	0.0030	0.00028	1	03/12/21 11:07	03/15/21 20:06	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 20:06	7440-38-2	
Barium	**0.033**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 20:06	7440-39-3	
Beryllium	**0.00025J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 20:06	7440-41-7	
Boron	**0.012J**	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 20:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 20:06	7440-43-9	
Chromium	**0.00070J**	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 20:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 20:06	7440-48-4	
Lead	**0.00015J**	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 20:06	7439-92-1	
Lithium	**0.0015J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 20:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 20:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 20:06	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:55	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**59.0**	mg/L	10.0	10.0	1		03/08/21 11:06		
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		03/15/21 04:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 04:04	16984-48-8	
Sulfate	**8.8**	mg/L	1.0	0.50	1		03/15/21 04:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525936

Sample: EB1 **Lab ID: 92525936006** Collected: 03/04/21 16:00 Received: 03/05/21 09:20 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	0.070	1	03/12/21 11:05	03/12/21 21:25	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	0.00028	1	03/12/21 11:07	03/15/21 20:12	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 20:12	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 20:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 20:12	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/12/21 11:07	03/15/21 20:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 20:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 20:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 20:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 20:12	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 20:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 20:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 20:12	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 09:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/08/21 11:07		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		03/15/21 04:19	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 04:19	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/15/21 04:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525936

Sample: PZ-37 **Lab ID: 92525936007** Collected: 03/04/21 11:55 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:05		
pH	**5.51**	Std. Units			1		03/08/21 09:05		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**118**	mg/L	1.0	0.070	1	03/12/21 11:05	03/12/21 21:29	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	0.00028	1	03/12/21 11:07	03/15/21 20:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/12/21 11:07	03/15/21 20:18	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.00071	1	03/12/21 11:07	03/15/21 20:18	7440-39-3	
Beryllium	**0.00017J**	mg/L	0.00050	0.000046	1	03/12/21 11:07	03/15/21 20:18	7440-41-7	
Boron	**12.4**	mg/L	0.40	0.052	10	03/12/21 11:07	03/16/21 16:17	7440-42-8	
Cadmium	**0.00028J**	mg/L	0.00050	0.00012	1	03/12/21 11:07	03/15/21 20:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/12/21 11:07	03/15/21 20:18	7440-47-3	
Cobalt	**0.0030J**	mg/L	0.0050	0.00038	1	03/12/21 11:07	03/15/21 20:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/12/21 11:07	03/15/21 20:18	7439-92-1	
Lithium	**0.028J**	mg/L	0.030	0.00081	1	03/12/21 11:07	03/15/21 20:18	7439-93-2	
Molybdenum	**0.0024J**	mg/L	0.010	0.00069	1	03/12/21 11:07	03/15/21 20:18	7439-98-7	
Selenium	**0.27**	mg/L	0.0050	0.0016	1	03/12/21 11:07	03/15/21 20:18	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/11/21 15:15	03/12/21 10:00	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**856**	mg/L	20.0	20.0	1		03/08/21 11:07		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.9**	mg/L	1.0	0.60	1		03/15/21 04:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/15/21 04:34	16984-48-8	
Sulfate	**485**	mg/L	11.0	5.5	11		03/15/21 17:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525936

QC Batch: 606033 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

METHOD BLANK: 3192886 Matrix: Water
Associated Lab Samples: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/12/21 19:19	

LABORATORY CONTROL SAMPLE: 3192887

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	111	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192890 3192891

Parameter	Units	92525936001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1.5	1	1	2.6	2.6	107	111	75-125	2	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525936

QC Batch: 606045
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

METHOD BLANK: 3193005 Matrix: Water
Associated Lab Samples: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/15/21 17:43	
Arsenic	mg/L	ND	0.0050	0.00078	03/15/21 17:43	
Barium	mg/L	ND	0.0050	0.00071	03/15/21 17:43	
Beryllium	mg/L	ND	0.00050	0.000046	03/15/21 17:43	
Boron	mg/L	ND	0.040	0.0052	03/15/21 17:43	
Cadmium	mg/L	ND	0.00050	0.00012	03/15/21 17:43	
Chromium	mg/L	ND	0.0050	0.00055	03/15/21 17:43	
Cobalt	mg/L	ND	0.0050	0.00038	03/15/21 17:43	
Lead	mg/L	ND	0.0010	0.000036	03/15/21 17:43	
Lithium	mg/L	ND	0.030	0.00081	03/15/21 17:43	
Molybdenum	mg/L	ND	0.010	0.00069	03/15/21 17:43	
Selenium	mg/L	ND	0.0050	0.0016	03/15/21 17:43	

LABORATORY CONTROL SAMPLE: 3193006

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	105	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	102	80-120	
Beryllium	mg/L	0.1	0.11	106	80-120	
Boron	mg/L	1	1.1	109	80-120	
Cadmium	mg/L	0.1	0.11	105	80-120	
Chromium	mg/L	0.1	0.11	105	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.11	105	80-120	
Molybdenum	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193007 3193008

Parameter	Units	92525931001 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	103	104	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	103	75-125	2	20	
Barium	mg/L	0.025	0.1	0.1	0.13	0.13	100	101	75-125	1	20	
Beryllium	mg/L	0.000099J	0.1	0.1	0.097	0.096	97	96	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525936

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3193007 3193008

Parameter	Units	92525931001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	0.98	0.97	98	97	75-125	1	20	
Cadmium	mg/L	ND	0.1	0.1	0.11	0.10	106	105	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.099	101	99	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.10	0.10	101	99	75-125	2	20	
Molybdenum	mg/L	ND	0.1	0.1	0.098	0.099	97	99	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	104	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525936

QC Batch: 605942 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

METHOD BLANK: 3192294 Matrix: Water
Associated Lab Samples: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/12/21 09:24	

LABORATORY CONTROL SAMPLE: 3192295

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3192296 3192297

Parameter	Units	92525931011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	97	97	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525936

QC Batch: 604765
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525936001, 92525936002, 92525936004

METHOD BLANK: 3186310 Matrix: Water
Associated Lab Samples: 92525936001, 92525936002, 92525936004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/06/21 12:29	

LABORATORY CONTROL SAMPLE: 3186311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	371	93	90-111	

SAMPLE DUPLICATE: 3186312

Parameter	Units	92525346009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	217	220	1	10	

SAMPLE DUPLICATE: 3186313

Parameter	Units	92525824003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	45.0	61.0	30	10	D6

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525936

QC Batch: 604895
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525936003, 92525936005, 92525936006, 92525936007

METHOD BLANK: 3186921 Matrix: Water
Associated Lab Samples: 92525936003, 92525936005, 92525936006, 92525936007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/08/21 11:05	

LABORATORY CONTROL SAMPLE: 3186922

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3186923

Parameter	Units	92526103001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	154	311	68	10	D6

SAMPLE DUPLICATE: 3186924

Parameter	Units	92525936007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	856	878	3	10	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525936

QC Batch: 606496
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: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

METHOD BLANK: 3195315 Matrix: Water
Associated Lab Samples: 92525936001, 92525936002, 92525936003, 92525936004, 92525936005, 92525936006, 92525936007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/14/21 21:28	
Fluoride	mg/L	ND	0.10	0.050	03/14/21 21:28	
Sulfate	mg/L	ND	1.0	0.50	03/14/21 21:28	

LABORATORY CONTROL SAMPLE: 3195316

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.5	93	90-110	
Fluoride	mg/L	2.5	2.7	107	90-110	
Sulfate	mg/L	50	46.8	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195317 3195318

Parameter	Units	92525931004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.8	50	50	50.1	49.8	97	96	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.8	111	111	90-110	0	10	M1
Sulfate	mg/L	61.7	50	50	98.6	98.0	74	73	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195319 3195320

Parameter	Units	92525936002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	22.9	50	50	67.6	70.1	89	94	90-110	4	10	M1
Fluoride	mg/L	0.14	2.5	2.5	2.4	2.6	91	97	90-110	6	10	
Sulfate	mg/L	91.7	50	50	126	124	70	65	90-110	2	10	M1

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: YATES
Pace Project No.: 92525936

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

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

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

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525936

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525936001	**YAMW-2**				
92525936002	**YAMW-4**				
92525936003	**YAMW-5**				
92525936004	**YAMW-1**				
92525936005	**PZ-35**				
92525936007	**PZ-37**				
92525936001	**YAMW-2**	EPA 3010A	606033	EPA 6010D	606330
92525936002	**YAMW-4**	EPA 3010A	606033	EPA 6010D	606330
92525936003	**YAMW-5**	EPA 3010A	606033	EPA 6010D	606330
92525936004	**YAMW-1**	EPA 3010A	606033	EPA 6010D	606330
92525936005	**PZ-35**	EPA 3010A	606033	EPA 6010D	606330
92525936006	**EB1**	EPA 3010A	606033	EPA 6010D	606330
92525936007	**PZ-37**	EPA 3010A	606033	EPA 6010D	606330
92525936001	**YAMW-2**	EPA 3005A	606045	EPA 6020B	606338
92525936002	**YAMW-4**	EPA 3005A	606045	EPA 6020B	606338
92525936003	**YAMW-5**	EPA 3005A	606045	EPA 6020B	606338
92525936004	**YAMW-1**	EPA 3005A	606045	EPA 6020B	606338
92525936005	**PZ-35**	EPA 3005A	606045	EPA 6020B	606338
92525936006	**EB1**	EPA 3005A	606045	EPA 6020B	606338
92525936007	**PZ-37**	EPA 3005A	606045	EPA 6020B	606338
92525936001	**YAMW-2**	EPA 7470A	605942	EPA 7470A	606185
92525936002	**YAMW-4**	EPA 7470A	605942	EPA 7470A	606185
92525936003	**YAMW-5**	EPA 7470A	605942	EPA 7470A	606185
92525936004	**YAMW-1**	EPA 7470A	605942	EPA 7470A	606185
92525936005	**PZ-35**	EPA 7470A	605942	EPA 7470A	606185
92525936006	**EB1**	EPA 7470A	605942	EPA 7470A	606185
92525936007	**PZ-37**	EPA 7470A	605942	EPA 7470A	606185
92525936001	**YAMW-2**	SM 2450C-2011	604765		
92525936002	**YAMW-4**	SM 2450C-2011	604765		
92525936003	**YAMW-5**	SM 2450C-2011	604895		
92525936004	**YAMW-1**	SM 2450C-2011	604765		
92525936005	**PZ-35**	SM 2450C-2011	604895		
92525936006	**EB1**	SM 2450C-2011	604895		
92525936007	**PZ-37**	SM 2450C-2011	604895		
92525936001	**YAMW-2**	EPA 300.0 Rev 2.1 1993	606496		
92525936002	**YAMW-4**	EPA 300.0 Rev 2.1 1993	606496		
92525936003	**YAMW-5**	EPA 300.0 Rev 2.1 1993	606496		
92525936004	**YAMW-1**	EPA 300.0 Rev 2.1 1993	606496		
92525936005	**PZ-35**	EPA 300.0 Rev 2.1 1993	606496		
92525936006	**EB1**	EPA 300.0 Rev 2.1 1993	606496		
92525936007	**PZ-37**	EPA 300.0 Rev 2.1 1993	606496		

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

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

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92525936

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

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

Date/Initials Person Examining Contents: 3/5/21 RP

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

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

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

Type of Ice:

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

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

Cooler Temp Corrected (°C): 2.0

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

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

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

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

Project #

WO#: 92525936

PM: KLH1 Due Date: 03/19/21

CLIENT: GA-GA Power

Sample #	BP4U-125 mL Plastic Unpreserved (N/A) (O)	BP3N-250 mL Plastic Unpreserved (N/A)	BP3U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP6Z-125 mL Plastic H2SO4 (pH < 2) (O)	BP3N-250 mL plastic HNO3 (pH < 2)	BP2Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP3C-125 mL Plastic NaOH (pH > 12) (O)	WGKU-Wide-mouth Glass Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (O)	AG1H-1 liter Amber HCl (pH < 2)	AG3S-250 mL Amber Unpreserved (N/A) (O)	AG1H-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG1M(DRO/8015) 1L Amber NH4Cl (N/A)(O)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9T-40 mL VOA Na2S2O3 (N/A)	VG9M (8 vials per kit)-Methanol (N/A)	VJ9K (3 vials per kit)-Methanol (N/A)	BP3T-125 mL Sterile Plastic (N/A - lab)	BP3Y-250 mL Sterile Plastic (N/A - lab)		BP4A-250 mL Plastic H2SO4 (pH < 2)	AG0U-100 mL Amber Unpreserved (N/A)	VG9U-20 mL Unpreserved (N/A)	DG9U-40 mL Unpreserved (N/A)
1																												
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

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

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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

COC 6

Section A Required Client Information:
Company: Georgia Power
Address: [illegible] Bridge Mill Ave
[illegible], GA [illegible]
Email:
Phone: [illegible] Fax:
Requested Due Date:

Section B Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: [illegible]
Project #:

Section C Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YAMW-2	WT		[illegible]	1410				5	x		x						x	x	x	x		pH: 5.63
2	YAMW-4	WT		[illegible]	1305				5	x		x						x	x	x	x		pH: 6.80
3	YAMW-3	WT		[illegible]	1415				5	x		x						x	x	x	x		pH: 5.32
4	[illegible]	WT																x	x	x	x		
5	YAMW-1	WT		[illegible]	1515				5	x		x						x	x	x	x		pH: 6.54
6	FD-[illegible]	WT		[illegible]	1530				5	x		x						x	x	x	x		pH: 5.64
7	EB1			[illegible]	1600				5	x		x						x	x	x	x		—
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	03/04/[illegible]	1605	[signature]	3/5/[illegible]	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Argyalis
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/04/2024

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

CCCLo

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
Marietta, GA 30114
Email: (770)384-8329 Fax:
Sampled Over Date:

Section B
Required Project Information:
Report To: Becky Steiner
Copy To:
PO/Sales Order #:
Project Name: Yates AMA
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com
Pace Profile #: 10449

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	O, P, Ext	App ion Meters	RAD 9315/9320	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
13	P2-37	WT	G	5/4/21	1155				5	1		1						X	X	X	X		pH-5.51
14		WT																X	X	X	X		
15		WT																X	X	X	X		
16		WT																X	X	X	X		
17		WT																X	X	X	X		
18		WT																X	X	X	X		
19		WT																X	X	X	X		
20		WT																X	X	X	X		
21		WT																X	X	X	X		
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	5/4/21	1445	Charlotte Pace	5/5/21	0900	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Lane Rupkewicz
SIGNATURE of SAMPLER: [signature] DATE Signed: 5-4-21

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

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

April 01, 2021

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

RE: Project: YATES RADS
Pace Project No.: 92525214

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

- Pace Analytical Services - Greensburg

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

Sincerely,

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

Enclosures

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

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

CERTIFICATIONS

Project: YATES RADS
Pace Project No.: 92525214

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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

SAMPLE SUMMARY

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525214001	**YGWA-5I**	Water	03/02/21 14:05	03/02/21 17:30
92525214002	**YGWA-5D**	Water	03/02/21 14:40	03/02/21 17:30
92525214003	**DUP-1**	Water	03/02/21 00:00	03/02/21 17:30
92525214005	**YGWA-14S**	Water	03/02/21 11:20	03/02/21 17:30
92525214006	**YGWA-30I**	Water	03/01/21 16:25	03/02/21 17:30
92525214007	**FB-01**	Water	03/02/21 11:30	03/02/21 17:30
92525214008	**DUP-01**	Water	03/02/21 00:00	03/02/21 17:30
92525214009	**FB-01**	Water	03/02/21 15:20	03/02/21 17:30
92525214011	**YGWA-40**	Water	03/04/21 10:10	03/05/21 09:20
92525214012	**YGWA-17S**	Water	03/03/21 12:20	03/05/21 09:20
92525214013	**YGWA-18S**	Water	03/03/21 13:50	03/05/21 09:20
92525214014	**YGWA-18I**	Water	03/03/21 15:00	03/05/21 09:20
92525214015	**YGWA-39**	Water	03/04/21 10:20	03/05/21 09:20
92525214016	**YGWA-1D (030321)**	Water	03/03/21 14:25	03/05/21 09:20
92525214017	**YGWA-1I (030321)**	Water	03/03/21 13:35	03/05/21 09:20
92525214018	**YGWA-2I (030321)**	Water	03/03/21 11:45	03/05/21 09:20
92525214019	**YGWA-3I (030321)**	Water	03/03/21 17:00	03/05/21 09:20
92525214020	**YGWA-3D (030321)**	Water	03/03/21 16:00	03/05/21 09:20
92525214021	**EB-02 (03032021)**	Water	03/03/21 17:15	03/05/21 09:20
92525214022	**YGWA-4I**	Water	03/03/21 10:35	03/05/21 09:20
92525214023	**YGWA-20S**	Water	03/03/21 09:40	03/05/21 09:20
92525214024	**YGWA-21I**	Water	03/03/21 09:35	03/05/21 09:20

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110 Technology Parkway
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SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525214001	**YGWA-5I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214002	**YGWA-5D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214003	**DUP-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214005	**YGWA-14S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214006	**YGWA-30I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214007	**FB-01**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214008	**DUP-01**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214009	**FB-01**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214011	**YGWA-40**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214012	**YGWA-17S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214013	**YGWA-18S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214014	**YGWA-18I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214015	**YGWA-39**	EPA 9315	LAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214016	**YGWA-1D (030321)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214017	**YGWA-1I (030321)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214018	**YGWA-2I (030321)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214019	**YGWA-3I (030321)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214020	**YGWA-3D (030321)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214021	**EB-02 (03032021)**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214022	**YGWA-4I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214023	**YGWA-20S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525214024	**YGWA-21I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214001	**YGWA-5I**					
EPA 9315	Radium-226	0.114 ± 0.190 (0.428) C:68% T:NA	pCi/L		03/22/21 08:37	
EPA 9320	Radium-228	0.465 ± 0.327 (0.633) C:78% T:92%	pCi/L		03/18/21 12:44	
Total Radium Calculation	Total Radium	0.579 ± 0.517 (1.06)	pCi/L		03/26/21 14:34	
92525214002	**YGWA-5D**					
EPA 9315	Radium-226	1.21 ± 0.344 (0.294) C:69% T:NA	pCi/L		03/22/21 08:37	
EPA 9320	Radium-228	0.457 ± 0.363 (0.727) C:76% T:95%	pCi/L		03/18/21 12:45	
Total Radium Calculation	Total Radium	1.67 ± 0.707 (1.02)	pCi/L		03/26/21 14:34	
92525214003	**DUP-1**					
EPA 9315	Radium-226	0.838 ± 0.268 (0.250) C:76% T:NA	pCi/L		03/22/21 08:37	
EPA 9320	Radium-228	0.784 ± 0.426 (0.783) C:78% T:87%	pCi/L		03/18/21 12:45	
Total Radium Calculation	Total Radium	1.62 ± 0.694 (1.03)	pCi/L		03/26/21 14:34	
92525214005	**YGWA-14S**					
EPA 9315	Radium-226	0.283 ± 0.267 (0.565) C:72% T:NA	pCi/L		03/22/21 08:41	
EPA 9320	Radium-228	0.427 ± 0.338 (0.673) C:76% T:92%	pCi/L		03/18/21 12:45	
Total Radium Calculation	Total Radium	0.710 ± 0.605 (1.24)	pCi/L		03/26/21 14:37	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214006	**YGWA-30I**					
EPA 9315	Radium-226	0.0562 ± 0.172 (0.408) C:79% T:NA	pCi/L		03/22/21 08:41	
EPA 9320	Radium-228	0.356 ± 0.278 (0.545) C:76% T:92%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	0.412 ± 0.450 (0.953)	pCi/L		03/26/21 14:37	
92525214007	**FB-01**					
EPA 9315	Radium-226	0.121 ± 0.131 (0.267) C:78% T:NA	pCi/L		03/22/21 08:41	
EPA 9320	Radium-228	0.512 ± 0.332 (0.620) C:73% T:88%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	0.633 ± 0.463 (0.887)	pCi/L		03/26/21 14:37	
92525214008	**DUP-01**					
EPA 9315	Radium-226	0.118 ± 0.120 (0.237) C:78% T:NA	pCi/L		03/22/21 08:48	
EPA 9320	Radium-228	0.809 ± 0.394 (0.692) C:79% T:90%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	0.927 ± 0.514 (0.929)	pCi/L		03/26/21 14:37	
92525214009	**FB-01**					
EPA 9315	Radium-226	-0.00506 ± 0.0722 (0.204) C:84% T:NA	pCi/L		03/22/21 08:48	
EPA 9320	Radium-228	0.675 ± 0.361 (0.652) C:76% T:96%	pCi/L		03/18/21 12:46	
Total Radium Calculation	Total Radium	0.675 ± 0.433 (0.856)	pCi/L		03/26/21 14:37	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214011	**YGWA-40**					
EPA 9315	Radium-226	0.268 ± 0.187 (0.319) C:74% T:NA	pCi/L		03/15/21 09:11	
EPA 9320	Radium-228	0.550 ± 0.416 (0.827) C:81% T:90%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.818 ± 0.603 (1.15)	pCi/L		03/22/21 10:37	
92525214012	**YGWA-17S**					
EPA 9315	Radium-226	0.192 ± 0.156 (0.276) C:74% T:NA	pCi/L		03/15/21 09:11	
EPA 9320	Radium-228	0.398 ± 0.319 (0.627) C:80% T:89%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.590 ± 0.475 (0.903)	pCi/L		03/22/21 10:37	
92525214013	**YGWA-18S**					
EPA 9315	Radium-226	0.141 ± 0.166 (0.344) C:59% T:NA	pCi/L		03/15/21 09:16	
EPA 9320	Radium-228	0.211 ± 0.322 (0.695) C:73% T:89%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.352 ± 0.488 (1.04)	pCi/L		03/22/21 10:37	
92525214014	**YGWA-18I**					
EPA 9315	Radium-226	0.381 ± 0.207 (0.351) C:65% T:NA	pCi/L		03/15/21 09:16	
EPA 9320	Radium-228	0.184 ± 0.282 (0.608) C:76% T:92%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.565 ± 0.489 (0.959)	pCi/L		03/22/21 10:37	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214015	**YGWA-39**					
EPA 9315	Radium-226	0.636 ± 0.257 (0.332) C:86% T:NA	pCi/L		03/15/21 09:11	
EPA 9320	Radium-228	-0.00538 ± 0.293 (0.687) C:78% T:93%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.636 ± 0.550 (1.02)	pCi/L		03/22/21 10:37	
92525214016	**YGWA-1D (030321)**					
EPA 9315	Radium-226	0.265 ± 0.193 (0.356) C:78% T:NA	pCi/L		03/15/21 09:13	
EPA 9320	Radium-228	0.227 ± 0.376 (0.819) C:76% T:90%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.492 ± 0.569 (1.18)	pCi/L		03/22/21 10:37	
92525214017	**YGWA-1I (030321)**					
EPA 9315	Radium-226	0.0715 ± 0.137 (0.315) C:73% T:NA	pCi/L		03/15/21 09:13	
EPA 9320	Radium-228	0.0339 ± 0.361 (0.831) C:76% T:84%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.105 ± 0.498 (1.15)	pCi/L		03/26/21 13:42	
92525214018	**YGWA-2I (030321)**					
EPA 9315	Radium-226	0.236 ± 0.183 (0.351) C:83% T:NA	pCi/L		03/15/21 09:13	
EPA 9320	Radium-228	0.223 ± 0.344 (0.744) C:72% T:93%	pCi/L		03/15/21 16:10	
Total Radium Calculation	Total Radium	0.459 ± 0.527 (1.10)	pCi/L		03/26/21 13:42	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214019	**YGWA-3I (030321)**					
EPA 9315	Radium-226	1.19 ± 0.315 (0.200) C:81% T:NA	pCi/L		03/22/21 09:34	
EPA 9320	Radium-228	0.837 ± 0.390 (0.655) C:82% T:90%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	2.03 ± 0.705 (0.855)	pCi/L		03/26/21 13:42	
92525214020	**YGWA-3D (030321)**					
EPA 9315	Radium-226	1.88 ± 0.434 (0.259) C:80% T:NA	pCi/L		03/22/21 08:28	
EPA 9320	Radium-228	1.70 ± 0.544 (0.701) C:74% T:90%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	3.58 ± 0.978 (0.960)	pCi/L		03/26/21 13:42	
92525214021	**EB-02 (03032021)**					
EPA 9315	Radium-226	0.0547 ± 0.0827 (0.178) C:78% T:NA	pCi/L		03/22/21 08:29	
EPA 9320	Radium-228	0.157 ± 0.333 (0.736) C:76% T:95%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	0.212 ± 0.416 (0.914)	pCi/L		03/26/21 13:42	
92525214022	**YGWA-4I**					
EPA 9315	Radium-226	0.783 ± 0.243 (0.164) C:76% T:NA	pCi/L		03/22/21 08:30	
EPA 9320	Radium-228	0.217 ± 0.319 (0.687) C:79% T:90%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	1.000 ± 0.562 (0.851)	pCi/L		03/26/21 13:42	

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SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525214

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525214023	**YGWA-20S**					
EPA 9315	Radium-226	0.133 ± 0.114 (0.212) C:89% T:NA	pCi/L		03/22/21 08:30	
EPA 9320	Radium-228	-0.163 ± 0.291 (0.711) C:79% T:96%	pCi/L		03/19/21 15:13	
Total Radium Calculation	Total Radium	0.133 ± 0.405 (0.923)	pCi/L		03/26/21 13:42	
92525214024	**YGWA-21I**					
EPA 9315	Radium-226	0.861 ± 0.270 (0.318) C:89% T:NA	pCi/L		03/22/21 08:31	
EPA 9320	Radium-228	0.338 ± 0.394 (0.829) C:72% T:86%	pCi/L		03/19/21 15:15	
Total Radium Calculation	Total Radium	1.20 ± 0.664 (1.15)	pCi/L		03/26/21 13:56	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-5I **Lab ID: 92525214001** Collected: 03/02/21 14:05 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.114 ± 0.190 (0.428) C:68% T:NA**	pCi/L	03/22/21 08:37	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.465 ± 0.327 (0.633) C:78% T:92%**	pCi/L	03/18/21 12:44	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.579 ± 0.517 (1.06)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-5D **Lab ID: 92525214002** Collected: 03/02/21 14:40 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.21 ± 0.344 (0.294) C:69% T:NA**	pCi/L	03/22/21 08:37	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.457 ± 0.363 (0.727) C:76% T:95%**	pCi/L	03/18/21 12:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.67 ± 0.707 (1.02)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: DUP-1 **Lab ID: 92525214003** Collected: 03/02/21 00:00 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.838 ± 0.268 (0.250) C:76% T:NA**	pCi/L	03/22/21 08:37	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.784 ± 0.426 (0.783) C:78% T:87%**	pCi/L	03/18/21 12:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.62 ± 0.694 (1.03)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-14S **Lab ID: 92525214005** Collected: 03/02/21 11:20 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.283 ± 0.267 (0.565) C:72% T:NA**	pCi/L	03/22/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.427 ± 0.338 (0.673) C:76% T:92%**	pCi/L	03/18/21 12:45	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.710 ± 0.605 (1.24)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-30I **Lab ID: 92525214006** Collected: 03/01/21 16:25 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0562 ± 0.172 (0.408) C:79% T:NA**	pCi/L	03/22/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.356 ± 0.278 (0.545) C:76% T:92%**	pCi/L	03/18/21 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.412 ± 0.450 (0.953)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: FB-01 **Lab ID: 92525214007** Collected: 03/02/21 11:30 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.121 ± 0.131 (0.267) C:78% T:NA**	pCi/L	03/22/21 08:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.512 ± 0.332 (0.620) C:73% T:88%**	pCi/L	03/18/21 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.633 ± 0.463 (0.887)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: DUP-01 **Lab ID: 92525214008** Collected: 03/02/21 00:00 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.118 ± 0.120 (0.237) C:78% T:NA**	pCi/L	03/22/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.809 ± 0.394 (0.692) C:79% T:90%**	pCi/L	03/18/21 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.927 ± 0.514 (0.929)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: FB-01 **Lab ID: 92525214009** Collected: 03/02/21 15:20 Received: 03/02/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.00506 ± 0.0722 (0.204) C:84% T:NA**	pCi/L	03/22/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.675 ± 0.361 (0.652) C:76% T:96%**	pCi/L	03/18/21 12:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.675 ± 0.433 (0.856)**	pCi/L	03/26/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-40 **Lab ID: 92525214011** Collected: 03/04/21 10:10 Received: 03/05/21 09:20 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	**0.268 ± 0.187 (0.319) C:74% T:NA**	pCi/L	03/15/21 09:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.550 ± 0.416 (0.827) C:81% T:90%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.818 ± 0.603 (1.15)**	pCi/L	03/22/21 10:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-17S **Lab ID: 92525214012** Collected: 03/03/21 12:20 Received: 03/05/21 09:20 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	**0.192 ± 0.156 (0.276) C:74% T:NA**	pCi/L	03/15/21 09:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.398 ± 0.319 (0.627) C:80% T:89%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.590 ± 0.475 (0.903)**	pCi/L	03/22/21 10:37	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-18S **Lab ID: 92525214013** Collected: 03/03/21 13:50 Received: 03/05/21 09:20 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	**0.141 ± 0.166 (0.344) C:59% T:NA**	pCi/L	03/15/21 09:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.211 ± 0.322 (0.695) C:73% T:89%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.352 ± 0.488 (1.04)**	pCi/L	03/22/21 10:37	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-18I **Lab ID: 92525214014** Collected: 03/03/21 15:00 Received: 03/05/21 09:20 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	**0.381 ± 0.207 (0.351) C:65% T:NA**	pCi/L	03/15/21 09:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.184 ± 0.282 (0.608) C:76% T:92%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.565 ± 0.489 (0.959)**	pCi/L	03/22/21 10:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-39 **Lab ID: 92525214015** Collected: 03/04/21 10:20 Received: 03/05/21 09:20 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	**0.636 ± 0.257 (0.332) C:86% T:NA**	pCi/L	03/15/21 09:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.00538 ± 0.293 (0.687) C:78% T:93%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.636 ± 0.550 (1.02)**	pCi/L	03/22/21 10:37	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-1D (030321) **Lab ID: 92525214016** Collected: 03/03/21 14:25 Received: 03/05/21 09:20 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	**0.265 ± 0.193 (0.356) C:78% T:NA**	pCi/L	03/15/21 09:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.227 ± 0.376 (0.819) C:76% T:90%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.492 ± 0.569 (1.18)**	pCi/L	03/22/21 10:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-1I (030321) **Lab ID: 92525214017** Collected: 03/03/21 13:35 Received: 03/05/21 09:20 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	**0.0715 ± 0.137 (0.315) C:73% T:NA**	pCi/L	03/15/21 09:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0339 ± 0.361 (0.831) C:76% T:84%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.105 ± 0.498 (1.15)**	pCi/L	03/26/21 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-2I (030321) **Lab ID: 92525214018** Collected: 03/03/21 11:45 Received: 03/05/21 09:20 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	**0.236 ± 0.183 (0.351) C:83% T:NA**	pCi/L	03/15/21 09:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.223 ± 0.344 (0.744) C:72% T:93%**	pCi/L	03/15/21 16:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.459 ± 0.527 (1.10)**	pCi/L	03/26/21 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-3I (030321) **Lab ID: 92525214019** Collected: 03/03/21 17:00 Received: 03/05/21 09:20 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	**1.19 ± 0.315 (0.200) C:81% T:NA**	pCi/L	03/22/21 09:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.837 ± 0.390 (0.655) C:82% T:90%**	pCi/L	03/19/21 15:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.03 ± 0.705 (0.855)**	pCi/L	03/26/21 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-3D (030321) **Lab ID: 92525214020** Collected: 03/03/21 16:00 Received: 03/05/21 09:20 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	**1.88 ± 0.434 (0.259) C:80% T:NA**	pCi/L	03/22/21 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.70 ± 0.544 (0.701) C:74% T:90%**	pCi/L	03/19/21 15:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.58 ± 0.978 (0.960)**	pCi/L	03/26/21 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: EB-02 (03032021) **Lab ID: 92525214021** Collected: 03/03/21 17:15 Received: 03/05/21 09:20 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	**0.0547 ± 0.0827 (0.178) C:78% T:NA**	pCi/L	03/22/21 08:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.157 ± 0.333 (0.736) C:76% T:95%**	pCi/L	03/19/21 15:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.212 ± 0.416 (0.914)**	pCi/L	03/26/21 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-4I **Lab ID: 92525214022** Collected: 03/03/21 10:35 Received: 03/05/21 09:20 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	**0.783 ± 0.243 (0.164) C:76% T:NA**	pCi/L	03/22/21 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.217 ± 0.319 (0.687) C:79% T:90%**	pCi/L	03/19/21 15:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.000 ± 0.562 (0.851)**	pCi/L	03/26/21 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-20S **Lab ID: 92525214023** Collected: 03/03/21 09:40 Received: 03/05/21 09:20 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	**0.133 ± 0.114 (0.212) C:89% T:NA**	pCi/L	03/22/21 08:30	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.163 ± 0.291 (0.711) C:79% T:96%**	pCi/L	03/19/21 15:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.133 ± 0.405 (0.923)**	pCi/L	03/26/21 13:42	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

Sample: YGWA-21I **Lab ID: 92525214024** Collected: 03/03/21 09:35 Received: 03/05/21 09:20 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	**0.861 ± 0.270 (0.318) C:89% T:NA**	pCi/L	03/22/21 08:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.338 ± 0.394 (0.829) C:72% T:86%**	pCi/L	03/19/21 15:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.20 ± 0.664 (1.15)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437643 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214005, 92525214006, 92525214007, 92525214008, 92525214009

METHOD BLANK: 2112540 Matrix: Water
Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214005, 92525214006, 92525214007, 92525214008, 92525214009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.387 ± 0.316 (0.633) C:83% T:90%	pCi/L	03/18/21 12:44	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437642 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

METHOD BLANK: 2112539 Matrix: Water
Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.219 ± 0.271 (0.570) C:75% T:92%	pCi/L	03/19/21 15:12	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437601 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

METHOD BLANK: 2112394 Matrix: Water
Associated Lab Samples: 92525214019, 92525214020, 92525214021, 92525214022, 92525214023, 92525214024

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0425 ± 0.110 (0.264) C:81% T:NA	pCi/L	03/22/21 08:26	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437599 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017, 92525214018

METHOD BLANK: 2112389 Matrix: Water
Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017, 92525214018

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.00470 ± 0.0712 (0.214) C:85% T:NA	pCi/L	03/15/21 09:18	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437641 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017, 92525214018

METHOD BLANK: 2112538 Matrix: Water
Associated Lab Samples: 92525214011, 92525214012, 92525214013, 92525214014, 92525214015, 92525214016, 92525214017, 92525214018

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.312 ± 0.330 (0.686) C:82% T:90%	pCi/L	03/15/21 16:07	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525214

QC Batch: 437602 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214005, 92525214006, 92525214007, 92525214008, 92525214009

METHOD BLANK: 2112395 Matrix: Water
Associated Lab Samples: 92525214001, 92525214002, 92525214003, 92525214005, 92525214006, 92525214007, 92525214008, 92525214009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0514 ± 0.104 (0.242) C:82% T:NA	pCi/L	03/22/21 08:37	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: YATES RADS
Pace Project No.: 92525214

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.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

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

TNI - The NELAC Institute.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525214001	**YGWA-5I**	EPA 9315	437602		
92525214002	**YGWA-5D**	EPA 9315	437602		
92525214003	**DUP-1**	EPA 9315	437602		
92525214005	**YGWA-14S**	EPA 9315	437602		
92525214006	**YGWA-30I**	EPA 9315	437602		
92525214007	**FB-01**	EPA 9315	437602		
92525214008	**DUP-01**	EPA 9315	437602		
92525214009	**FB-01**	EPA 9315	437602		
92525214011	**YGWA-40**	EPA 9315	437599		
92525214012	**YGWA-17S**	EPA 9315	437599		
92525214013	**YGWA-18S**	EPA 9315	437599		
92525214014	**YGWA-18I**	EPA 9315	437599		
92525214015	**YGWA-39**	EPA 9315	437599		
92525214016	**YGWA-1D (030321)**	EPA 9315	437599		
92525214017	**YGWA-1I (030321)**	EPA 9315	437599		
92525214018	**YGWA-2I (030321)**	EPA 9315	437599		
92525214019	**YGWA-3I (030321)**	EPA 9315	437601		
92525214020	**YGWA-3D (030321)**	EPA 9315	437601		
92525214021	**EB-02 (03032021)**	EPA 9315	437601		
92525214022	**YGWA-4I**	EPA 9315	437601		
92525214023	**YGWA-20S**	EPA 9315	437601		
92525214024	**YGWA-21I**	EPA 9315	437601		
92525214001	**YGWA-5I**	EPA 9320	437643		
92525214002	**YGWA-5D**	EPA 9320	437643		
92525214003	**DUP-1**	EPA 9320	437643		
92525214005	**YGWA-14S**	EPA 9320	437643		
92525214006	**YGWA-30I**	EPA 9320	437643		
92525214007	**FB-01**	EPA 9320	437643		
92525214008	**DUP-01**	EPA 9320	437643		
92525214009	**FB-01**	EPA 9320	437643		
92525214011	**YGWA-40**	EPA 9320	437641		
92525214012	**YGWA-17S**	EPA 9320	437641		
92525214013	**YGWA-18S**	EPA 9320	437641		
92525214014	**YGWA-18I**	EPA 9320	437641		
92525214015	**YGWA-39**	EPA 9320	437641		
92525214016	**YGWA-1D (030321)**	EPA 9320	437641		
92525214017	**YGWA-1I (030321)**	EPA 9320	437641		
92525214018	**YGWA-2I (030321)**	EPA 9320	437641		
92525214019	**YGWA-3I (030321)**	EPA 9320	437642		
92525214020	**YGWA-3D (030321)**	EPA 9320	437642		
92525214021	**EB-02 (03032021)**	EPA 9320	437642		
92525214022	**YGWA-4I**	EPA 9320	437642		
92525214023	**YGWA-20S**	EPA 9320	437642		
92525214024	**YGWA-21I**	EPA 9320	437642		
92525214001	**YGWA-5I**	Total Radium Calculation	440666		
92525214002	**YGWA-5D**	Total Radium Calculation	440666		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES RADS
Pace Project No.: 92525214

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525214003	**DUP-1**	Total Radium Calculation	440666		
92525214005	**YGWA-14S**	Total Radium Calculation	440668		
92525214006	**YGWA-30I**	Total Radium Calculation	440668		
92525214007	**FB-01**	Total Radium Calculation	440668		
92525214008	**DUP-01**	Total Radium Calculation	440668		
92525214009	**FB-01**	Total Radium Calculation	440668		
92525214011	**YGWA-40**	Total Radium Calculation	439752		
92525214012	**YGWA-17S**	Total Radium Calculation	439752		
92525214013	**YGWA-18S**	Total Radium Calculation	439752		
92525214014	**YGWA-18I**	Total Radium Calculation	439752		
92525214015	**YGWA-39**	Total Radium Calculation	439752		
92525214016	**YGWA-1D (030321)**	Total Radium Calculation	439752		
92525214017	**YGWA-1I (030321)**	Total Radium Calculation	440644		
92525214018	**YGWA-2I (030321)**	Total Radium Calculation	440644		
92525214019	**YGWA-3I (030321)**	Total Radium Calculation	440644		
92525214020	**YGWA-3D (030321)**	Total Radium Calculation	440644		
92525214021	**EB-02 (03032021)**	Total Radium Calculation	440644		
92525214022	**YGWA-4I**	Total Radium Calculation	440644		
92525214023	**YGWA-20S**	Total Radium Calculation	440644		
92525214024	**YGWA-21I**	Total Radium Calculation	440647		

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

Laboratory receiving samples:

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

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: WO# : 92525214

92525214

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

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

Date/Initials Person Examining Contents: MT 3/11/21

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

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

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

Type of Ice:

Cooler Temp: 4.0 Correction Factor: Add/Subtract (°C) +0

Cooler Temp Corrected (°C): 4.0

Temp should be above freezing to 6°C

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

USDA Regulated Soil (☐ N/A, water sample)

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

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

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

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 4

CDC | UI

Section A – Required Client Information:
Company: Georgia Power
Address: [illegible] Bridge Mill Ave
[illegible], GA 30114
Phone: [illegible]

Section B – Required Project Information:
Report To: [illegible]
Project Name: Yates AMA

Section C – Invoice Information:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Residual Chlorine (Y/N): 922S214

ITEM #	SAMPLE ID	MATRIX CODE	START DATE	START TIME	# OF CONTAINERS	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Notes
1		WT								
2		WT				X	X	X	X	
3		WT				X	X	X	X	
4	[illegible]	WT				X	X	X	X	
5	YGWA-5I	WT	3/2	1405	5	X	X	X	X	
6	YGWA-5D	WT	3/2	1440	5	X	X	X	X	pH 5.63
7	DUP-1	WT	3/2	–	5	X	X	X	X	pH 7.15
8	[illegible]	WT				X	X	X	X	
9	[illegible]	WT				X	X	X	X	
10	[illegible]	WT				X	X	X	X	
11	[illegible]	WT				X	X	X	X	
12	[illegible]	WT				X	X	X	X	

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
[signature]	[illegible]	1600	[signature]	3-2-21	1600				
	3-2-21	1730	[signature]	3/2/21	1030	4.0	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: [illegible]
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/02/2021

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 4

COC 1 - U6

Section A – Required Client Information:
Company: Georgia Power
Address: 1600 Bridge Mill Ave
[illegible], GA 30114
Phone: (770) [illegible] Fax:
Requested Due Date:

Section B – Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates [illegible] Up Gradient
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: 10040

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1		WT																X	X	X	X	4262524 pH
2		WT																X	X	X	X	
3		WT																X	X	X	X	
4	YGWA-47	WT		3/1	1120				5	✓								X	X	X	X	pH 5.48
5	[illegible]	WT																X	X	X	X	
6	[illegible]	WT																X	X	X	X	
7	[illegible]	WT																X	X	X	X	
8	[illegible]	WT																X	X	X	X	
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	03/02/21	1530	[signature]	3-2-21	1530				
	[signature]	3.2.21	1730	[signature] / Pace	3/2/21	1730	4.2	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Pappakis
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/02/2021

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

Pace Analytical®

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 4

CoC 1 - UG

Section A — Required Client Information:
Company: Georgia Power
Address: 2480 Maner Road / 1070 Bridge Mill Ave
[illegible], GA 30114
Phone: (770) [illegible] Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates [illegible] UG Gradient
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N) 9252524
1	[illegible]	WT																X	X	X	X	
2	[illegible]	WT																X	X	X	X	
3	[illegible]	WT																X	X	X	X	
4	[illegible]	WT																X	X	X	X	
5	[illegible]	WT																X	X	X	X	
6	YGWA-14S	WT		3/2	1121				5	/		/						X	X	X	X	pH: 5.49
7	YGWA-30I	WT		3/2	1220				5	/		/						X	X	X	X	pH 5.78
8	[illegible] FB-01	WT		3/2	1138				5	/		/						X	X	X	X	—
9	[illegible] DUP-01	WT		3/2	—				5	/		/						X	X	X	X	—
10	[illegible]	WT																X	X	X	X	
11	[illegible]	WT																X	X	X	X	
12	[illegible]	WT																X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	3/2	1730	[signature] / Pace	3/2/21	1730	4.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kokila [illegible]

SIGNATURE of SAMPLER: [signature]

DATE Signed: 3/2/2021

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 4 of 4

COC 1 (Updated)

Section A — Required Client Information:

Company: Georgia Power
Address: 1070 Bridge Mill Ave
[illegible] GA 30114
Phone: (770)384-6529 Fax
Required Due Date:

Section B — Required Project Information:

Report To: Becky Gleaver
Copy To:
Purchase Order #:
Project Name: Yates Combustion Up Grade
Project #:

Section C — Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com
Pace Profile #: 10040

Regulatory Agency:
State / Location: GA

Requested Analysis Filtered (Y/N)

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: TDS	Cl, F, SO4	App Volatile Metals	EAD 6010/6020	Residual Chlorine (Y/N)	
	WT																X	X	X	X		
	WT																X	X	X	X		
FB-01	WT		3/2	1520				3	✓		✓						X	X	X	X		
[illegible]	WT		3/2	1510				6	✓		✓						X	X	X	X		
[illegible]	WT																X	X	X	X		
[illegible]	WT																X	X	X	X		
[illegible]	WT																X	X	X	X		
[illegible]	WT																X	X	X	X		
[illegible]	WT																X	X	X	X		
[illegible]	WT																X	X	X	X		
[illegible]	WT																X	X	X	X		

Residual Chlorine (Y/N): 42625414 [illegible] 42542

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS				
	[signature]	3/2/21	1520	[signature]	3/2/21	1520					
	[signature]	3-2-21	1736	Dave Mance	3/2/21	1730	4.0	Y	Y	Y	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Steven Summers

SIGNATURE of SAMPLER: [signature] DATE Signed: 3/2/21

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 5

COC

Section A — Required Client Information:
Company: Georgia Power
Address: [illegible]
[illegible], GA [illegible]
Phone: [illegible]
Requested Due Date:

Section B — Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #
Project Name: [illegible]
Project #

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start Date	Start Time	End Date	End Time	# of Containers	Analyses Test: TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	[illegible]	WT											
2	YGWA-40	WT		3/4/2021	10:16			5 / /	X	X	X	X	pH 5.23
3	[illegible]	WT											
4	[illegible]	WT											
5	[illegible]	WT											
6	[illegible]	WT											
7													
8													
9													
10													
11													
12													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3-4-21	1645	[signature] 3/5/21 0930			

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Bopkiewicz
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3-4-21

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

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 5

Section A
Required Client Information:
Agency: Georgia Power
Address: 1379 Bridge Mill Ave
Phone: (770)384-4326 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Strawser
Copy To:
Purchase Order #:
Project Name: Yates Ash
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

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

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test	Y/N	TDS	Cl, F, SO4	App. Silica Metals	Rad 9315/9320	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1		WT																						
2		WT																						
3		WT																						
4	[illegible]	WT																						
5	[illegible]	WT																						
6	[illegible]	WT																						
7	YDWA-17D	WT		3/3	1220				5	✓										X	X	X	X	Ph: 5.52
8	YDWA-16S	WT		3/3	1350				5	✓	✓									X	X	X	X	Ph: 5.3
9	YDWA-16I	WT		3/3	1500				5	✓	/									X	X	X	X	Ph 5.87
10	[illegible]	WT																						
11	[illegible]	WT																						
12	[illegible]	WT		3/4	0																			Ph 7.5

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Jake Simpson	3/4/21	1700	Claudia Hess	3/5/21	0920	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Simpson

SIGNATURE of SAMPLER: [signature]

DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 3 of 5

COC 1

Section A
Required Client Information:
Company: Georgia Power
Address: 1970 Bridge Mill Ave
Suwanee, GA 30174
Phone: (770) 264-8326 Fax:
Turnaround Due Date:

Section B
Required Project Information:
Report To: Jacky Stewart
Copy To:
Purchase Order #:
Project Name: Yates 7kV
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kristin.fleming@pacelabs.com
Pace Profile #: 10641

Regulatory Agency
State / Location
GA

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

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test: TDS	Cl, F, SO4	App corr losses	RAD 9315/9320	Residual Chlorine (Y/N)
1	YGWA-39	WT		3/4	1120				5	X								X	X	X	X	
2		WT																				
3		WT																				
4		WT																				
5		WT																				
6		WT																				
7		WT																				
8																						
9																						
10																						
11																						
12																						

Ph: 5.54

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Jake Swanson	3/4/21	1700	Pace Courier	3/5/21	0930	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 4 of 5

COC [illegible] UG

Section A — Required Client Information:
Company: Georgia Power
Address: [illegible]
[illegible], GA [illegible]
Phone: (770) [illegible] | Fax
Requested Due Date:

Section B — Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: Yates AP-2
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YGWA-[illegible] (030321)	WT		3/3	1415				5	4		1						x	x	x	x	pH	7.70
2	YGWA-[illegible] (030321)	WT		3/3	1335				5	4		1						x	x	x	x	pH	5.86
3	YGWA-[illegible] (030321)	WT		3/3	1145				5	4		1						x	x	x	x	pH	7.92
4	YGWA-[illegible] (030321)	WT		3/3	[illegible]				5	4		1						x	x	x	x	pH	8.13
5	YGWA-[illegible] (030321)	WT		3/3	1400				5	4		1						x	x	x	x	pH	8.39
6	[illegible]	WT																x	x	x	x	—	
7	[illegible]	WT																x	x	x	x	—	
8	[illegible]	WT																x	x	x	x		
9	[illegible]	WT																x	x	x	x		
10	[illegible]	WT																x	x	x	x	—	
11	[illegible]	WT																x	x	x	x	—	
12	[illegible] EB-02 (03032021)	WT		3/3	1715				5	4		1						x	x	x	x	—	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[illegible signature] / [illegible]	3/4		[illegible signature]	3/4/21	0920	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible]

SIGNATURE of SAMPLER: [illegible]

DATE Signed: 3/4/21

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 5 of 5

COC 1

Section A — Required Client Information:
Company: Georgia Power
Address: [illegible] Bridge Mill Ave
[illegible], GA 30114
Email:
Phone: (770) [illegible] Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]@pacelabs.com
Pace Profile #: [illegible]

Regulatory Agency
State / Location: GA

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

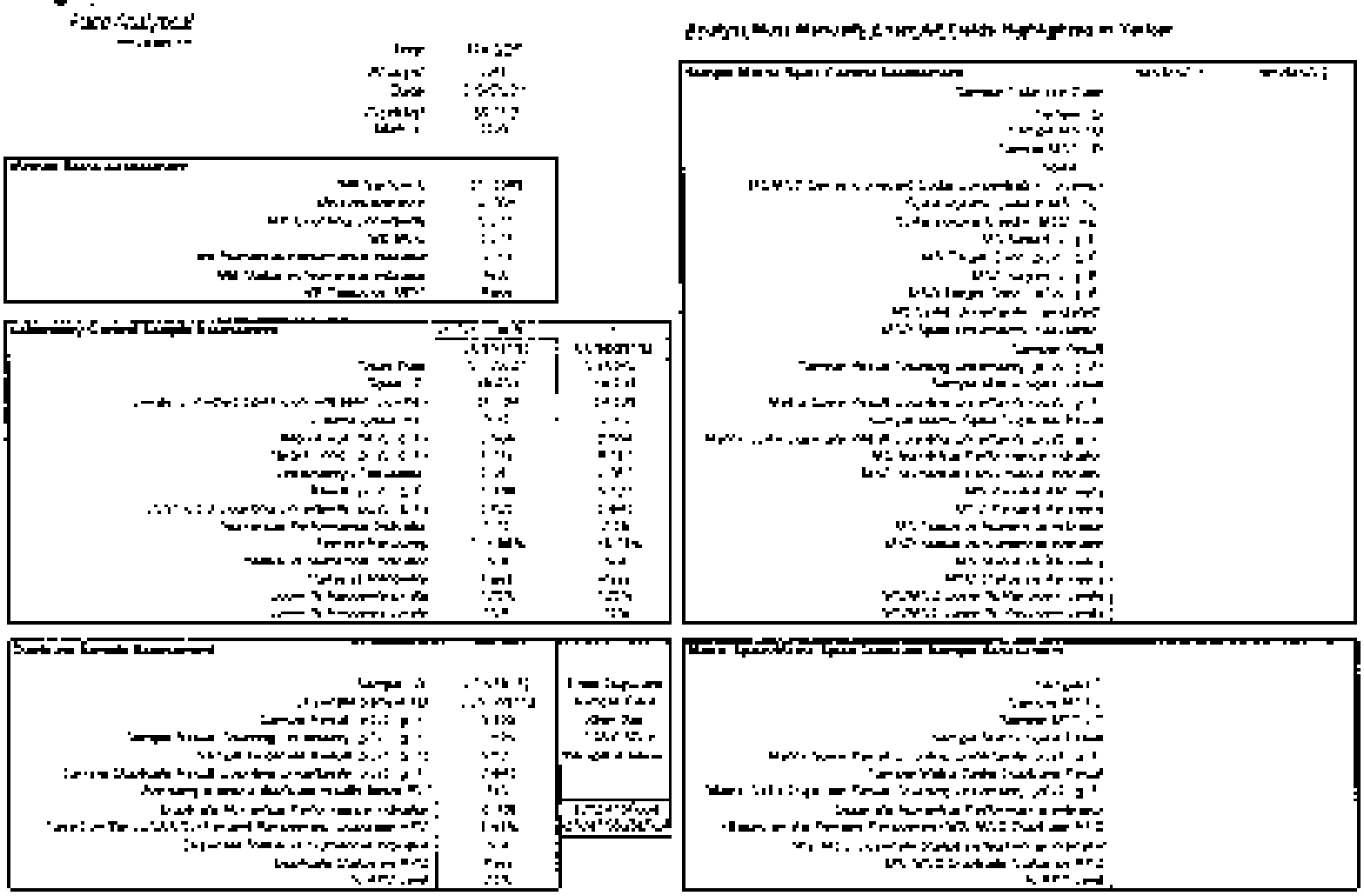
ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	Sample Conditions
1		WT																X	X	X	X		
2		WT																X	X	X	X		
3		WT																X	X	X	X		
4	YGWA-[illegible]	WT		[illegible]	1035				5	X		X						X	X	X	X		pH: 6.21
5	[illegible]	WT																X	X	X	X		—
6	[illegible]	WT																X	X	X	X		—
7	[illegible]	WT																X	X	X	X		—
8	[illegible]	WT																X	X	X	X		—
9	[illegible]	WT																X	X	X	X		—
10	YGWA-[illegible]	WT		[illegible]	0940				5	X		X						X	X	X	X		pH: 5.89
11	YGWA-[illegible]	WT		[illegible]	0905				5	X		X						X	X	X	X		pH: 5.80
12	[illegible]	WT																X	X	X	X		—

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3/4/24	1605	Charles [illegible]	3/5/24	0930	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter [illegible]
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/04/2024

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

Quality Control Sample Performance Assessment



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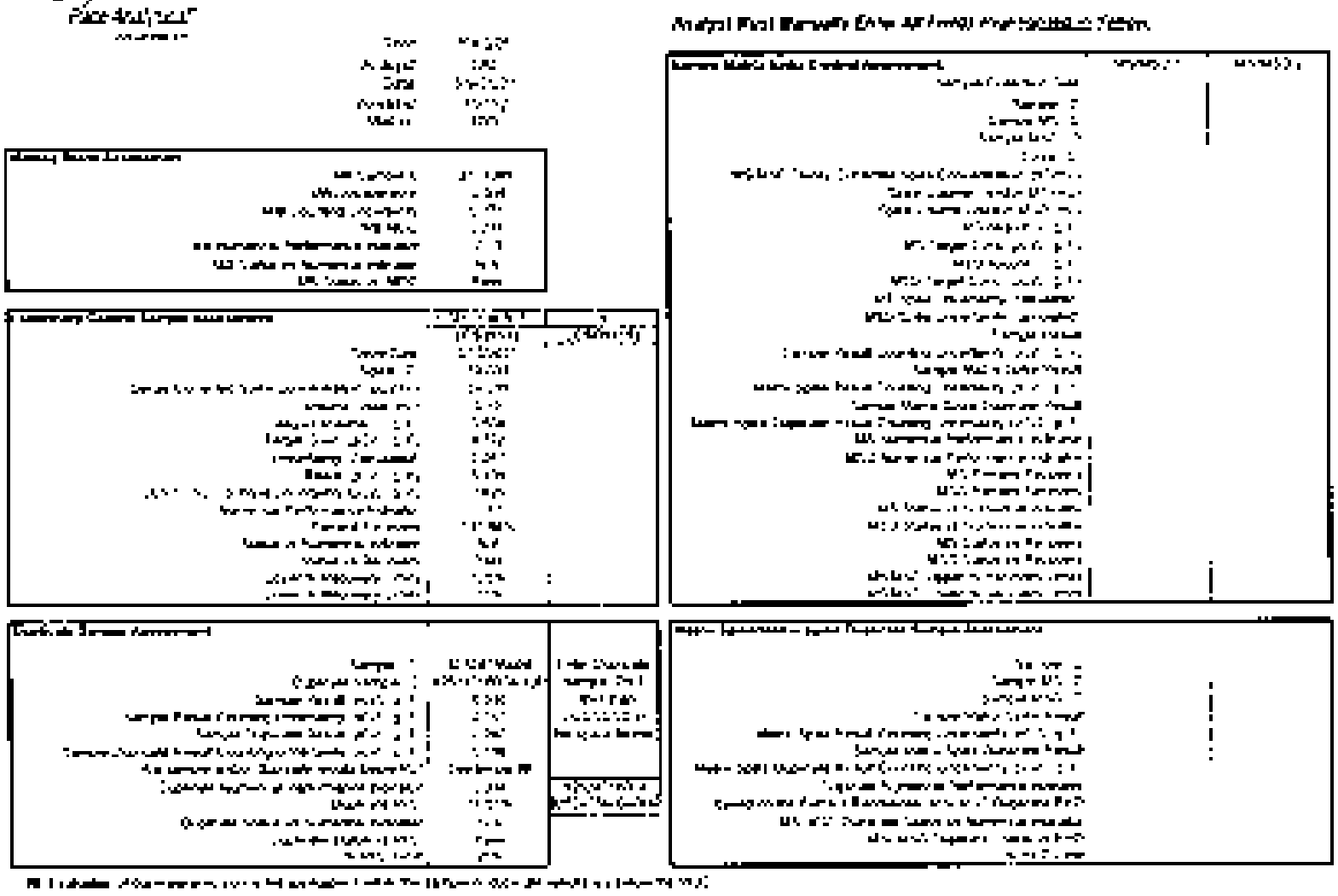
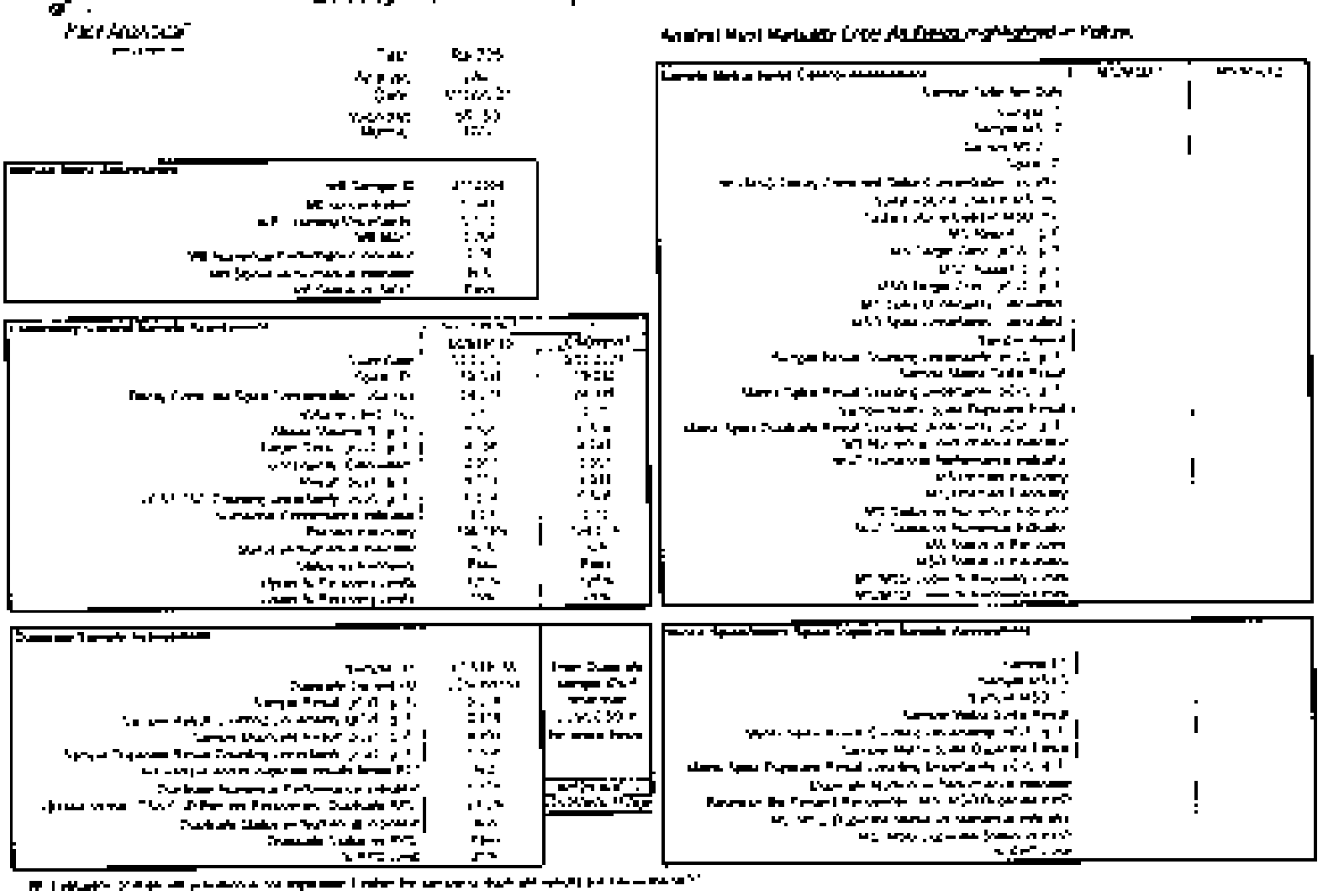
Quality Control Sample Performance Assessment



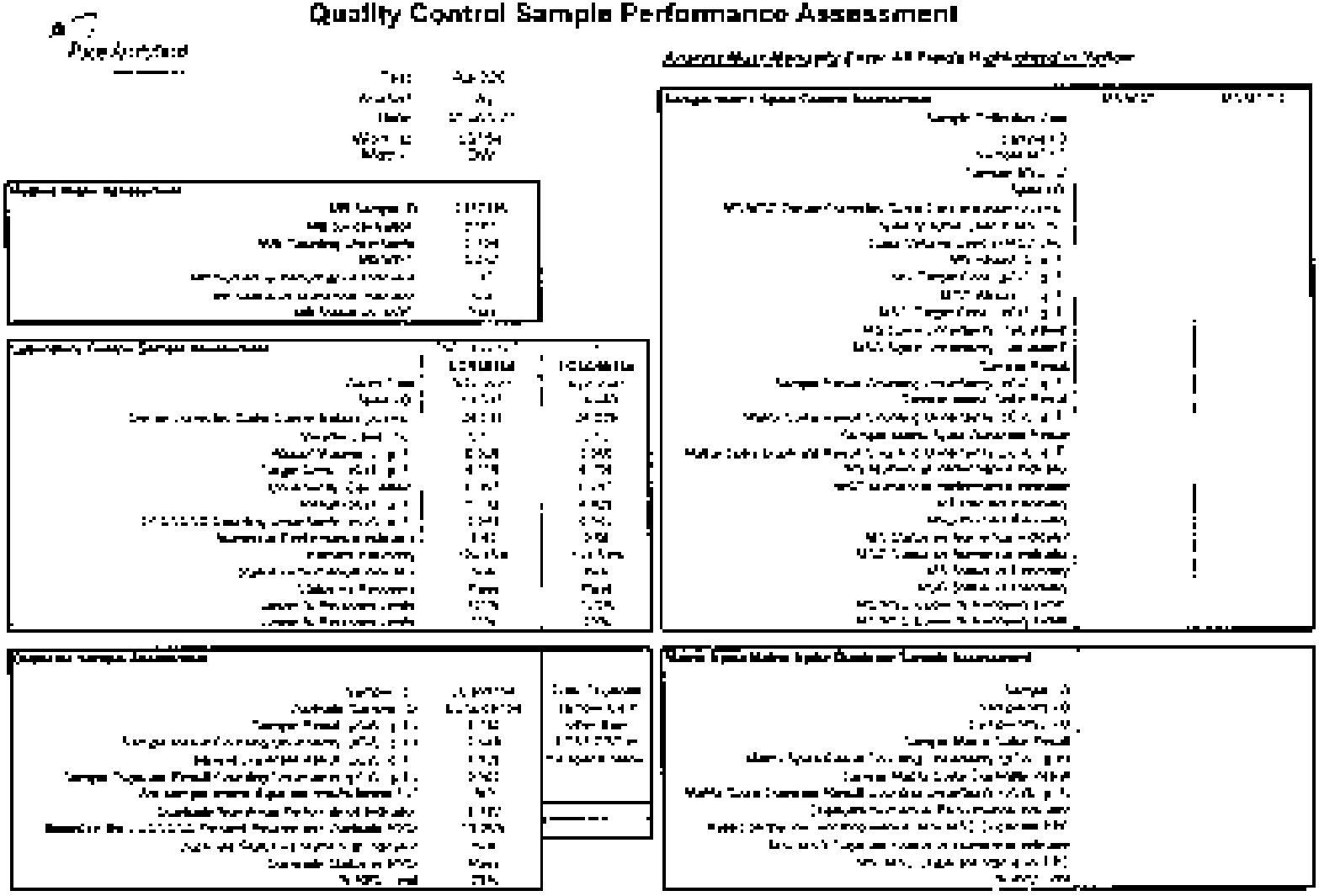
Quality Control Sample Performance Assessment

Quality Control Sample Performance Assessment

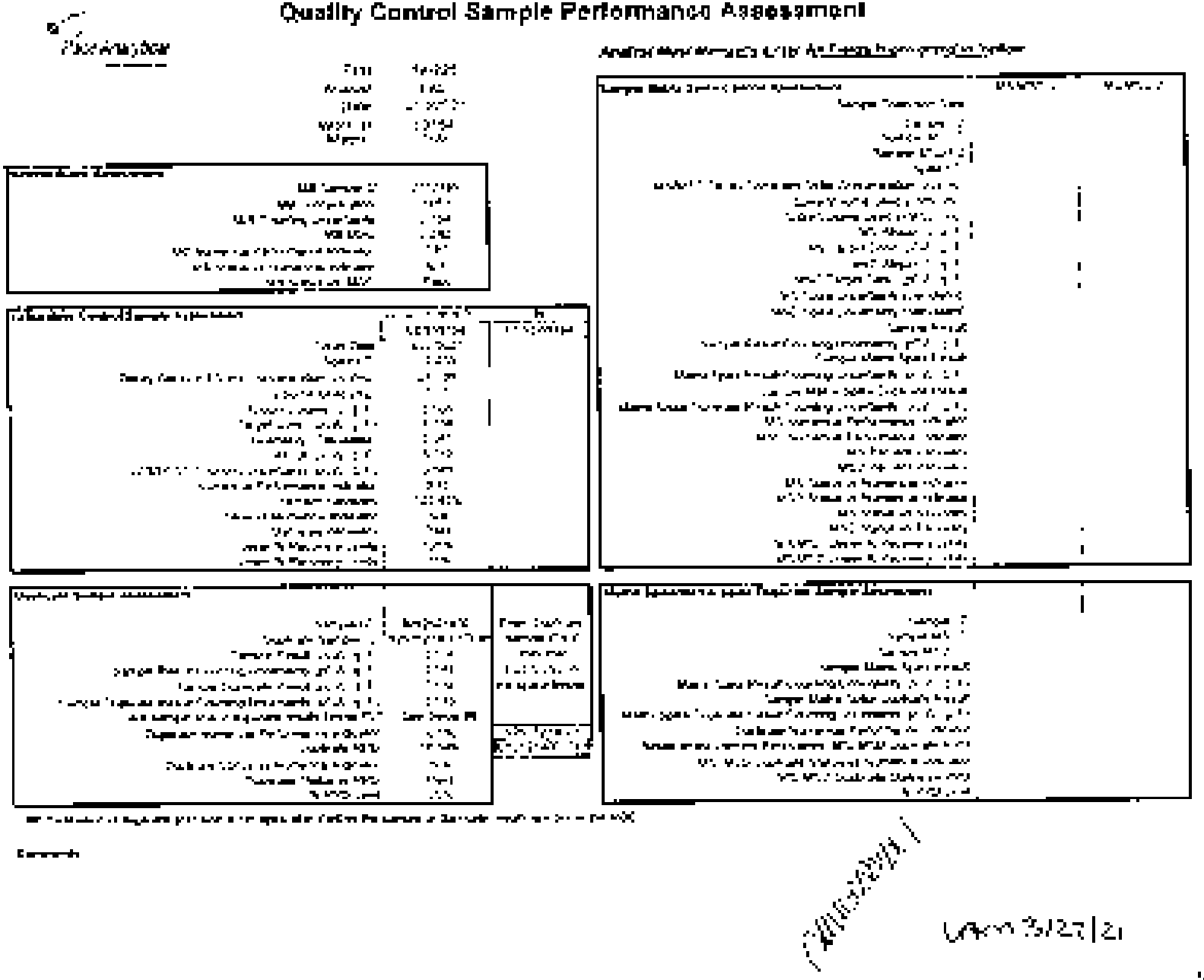


Page 56 of 61

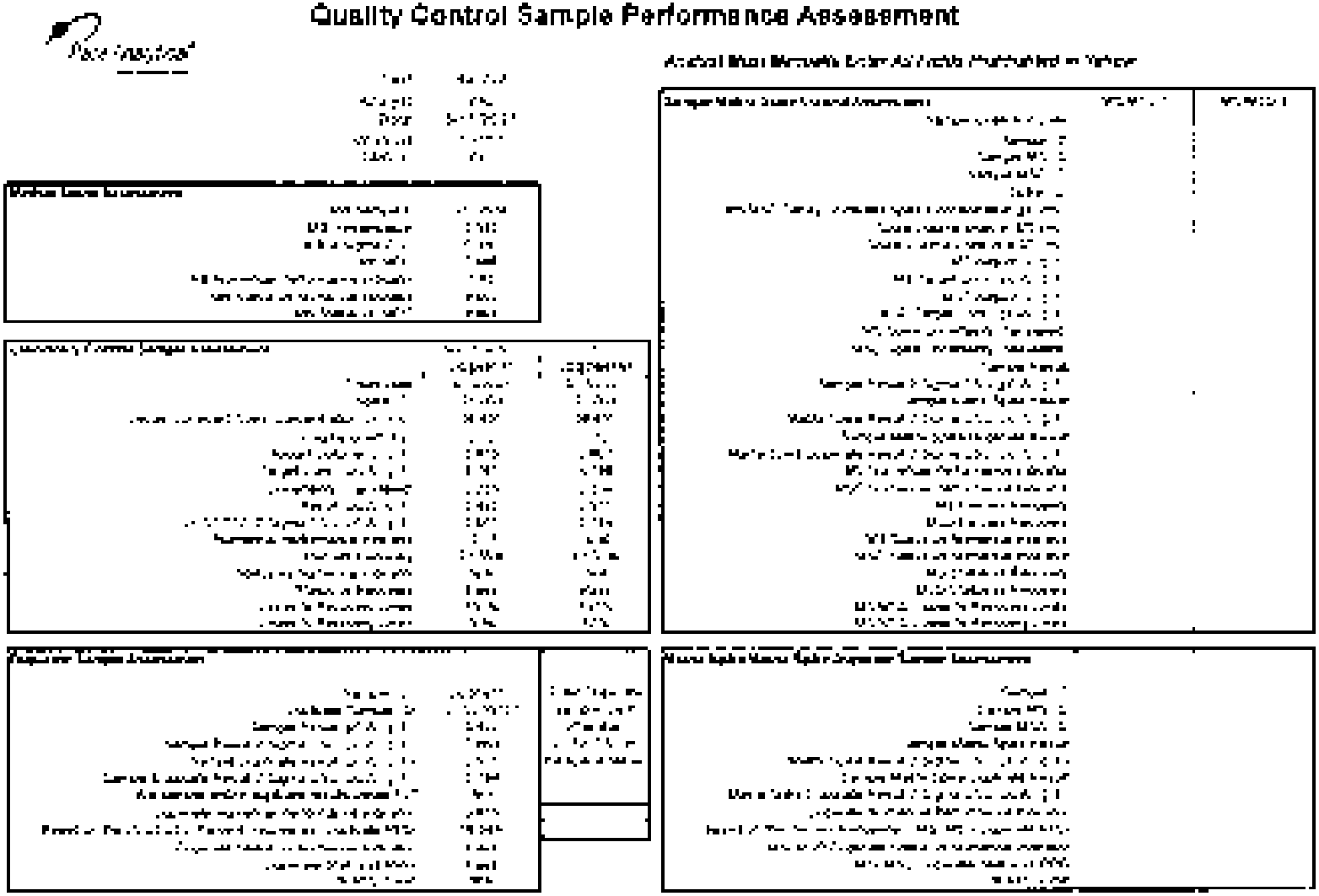
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



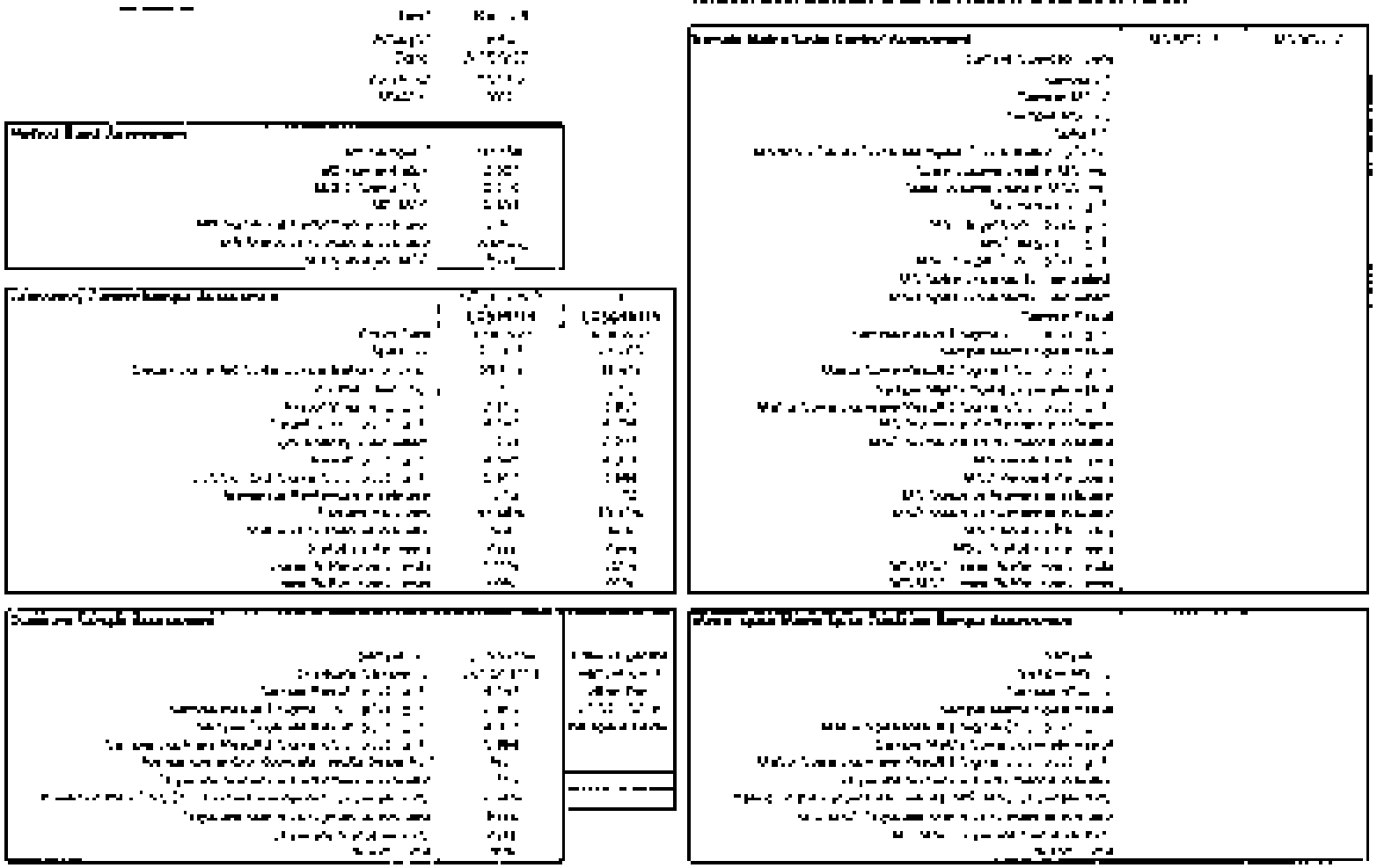
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment

Comments:

Quality Control Sample Performance Assessment



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

March 26, 2021

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

RE: Project: YATES
Pace Project No.: 92525335

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between March 02, 2021 and March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

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

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tyler Forney for
Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES
Pace Project No.: 92525335

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525335001	**YGWA-5I**	Water	03/02/21 14:05	03/02/21 17:30
92525335002	**YGWA-5D**	Water	03/02/21 14:40	03/02/21 17:30
92525335003	**DUP-1**	Water	03/02/21 00:00	03/02/21 17:30
92525335005	**YGWA-14S**	Water	03/02/21 11:20	03/02/21 17:30
92525335006	**YGWA-30I**	Water	03/01/21 16:25	03/02/21 17:30
92525335007	**FB-01**	Water	03/02/21 11:30	03/02/21 17:30
92525335008	**DUP-01**	Water	03/02/21 00:00	03/02/21 17:30
92525335009	**FB-01**	Water	03/02/21 15:20	03/02/21 17:30
92525335011	**YGWA-40**	Water	03/04/21 10:10	03/05/21 09:20
92525335012	**YGWA-17S**	Water	03/03/21 12:20	03/05/21 09:20
92525335013	**YGWA-18S**	Water	03/03/21 13:50	03/05/21 09:20
92525335014	**YGWA-18I**	Water	03/03/21 15:00	03/05/21 09:20
92525335015	**YGWA-39**	Water	03/04/21 10:20	03/05/21 09:20
92525335016	**YGWA-1D (030321)**	Water	03/03/21 14:25	03/05/21 09:20
92525335017	**YGWA-1I (030321)**	Water	03/03/21 13:35	03/05/21 09:20
92525335018	**YGWA-2I (030321)**	Water	03/03/21 11:45	03/05/21 09:20
92525335019	**YGWA-3I (030321)**	Water	03/03/21 17:00	03/05/21 09:20
92525335020	**YGWA-3D (030321)**	Water	03/03/21 16:00	03/05/21 09:20
92525335021	**EB-02 (03032021)**	Water	03/03/21 17:15	03/05/21 09:20
92525335022	**YGWA-4I**	Water	03/03/21 10:35	03/05/21 09:20
92525335023	**YGWA-20S**	Water	03/03/21 09:40	03/05/21 09:20
92525335024	**YGWA-21I**	Water	03/04/21 09:35	03/05/21 09:20

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92525335001	**YGWA-5I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335002	**YGWA-5D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335003	**DUP-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335005	**YGWA-14S**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335006	**YGWA-30I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335007	**FB-01**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335008	**DUP-01**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335009	**FB-01**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	JRS	1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	JLH	3
92525335011	**YGWA-40**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335012	**YGWA-17S**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335013	**YGWA-18S**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335014	**YGWA-18I**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335015	**YGWA-39**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335016	**YGWA-1D (030321)**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335017	**YGWA-1I (030321)**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335018	**YGWA-2I (030321)**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335019	**YGWA-3I (030321)**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335020	**YGWA-3D (030321)**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335021	**EB-02 (03032021)**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335022	**YGWA-4I**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335023	**YGWA-20S**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	AW1	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92525335024	**YGWA-21I**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2450C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525335

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335001	**YGWA-5I**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.63	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	2.6	mg/L	1.0	03/09/21 02:21	
EPA 6020B	Barium	0.019	mg/L	0.0050	03/05/21 16:43	
EPA 6020B	Boron	0.011J	mg/L	0.040	03/05/21 16:43	
EPA 6020B	Lead	0.000092J	mg/L	0.0010	03/05/21 16:43	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	03/05/21 16:43	
SM 2450C-2011	Total Dissolved Solids	67.0	mg/L	10.0	03/04/21 14:30	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	03/06/21 20:37	
EPA 300.0 Rev 2.1 1993	Sulfate	2.3	mg/L	1.0	03/06/21 20:37	
92525335002	**YGWA-5D**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	7.15	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	1.6	mg/L	1.0	03/09/21 02:41	
EPA 6020B	Barium	0.014	mg/L	0.0050	03/05/21 16:49	
EPA 6020B	Boron	0.0068J	mg/L	0.040	03/05/21 16:49	
EPA 6020B	Lead	0.000051J	mg/L	0.0010	03/05/21 16:49	
EPA 6020B	Lithium	0.0018J	mg/L	0.030	03/05/21 16:49	
SM 2450C-2011	Total Dissolved Solids	52.0	mg/L	10.0	03/04/21 14:30	
EPA 300.0 Rev 2.1 1993	Chloride	3.2	mg/L	1.0	03/06/21 21:49	
EPA 300.0 Rev 2.1 1993	Sulfate	2.6	mg/L	1.0	03/06/21 21:49	
92525335003	**DUP-1**					
EPA 6010D	Calcium	1.5	mg/L	1.0	03/09/21 02:46	
EPA 6020B	Antimony	0.0015J	mg/L	0.0030	03/05/21 17:11	
EPA 6020B	Barium	0.014	mg/L	0.0050	03/05/21 17:11	
EPA 6020B	Boron	0.013J	mg/L	0.040	03/05/21 17:11	
EPA 6020B	Lead	0.000069J	mg/L	0.0010	03/05/21 17:11	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/05/21 17:11	
SM 2450C-2011	Total Dissolved Solids	48.0	mg/L	10.0	03/04/21 14:30	
EPA 300.0 Rev 2.1 1993	Chloride	3.0	mg/L	1.0	03/06/21 22:04	
EPA 300.0 Rev 2.1 1993	Sulfate	2.0	mg/L	1.0	03/06/21 22:04	
92525335005	**YGWA-14S**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.49	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	1.2	mg/L	1.0	03/09/21 02:56	
EPA 6020B	Barium	0.0076	mg/L	0.0050	03/05/21 17:23	
EPA 6020B	Beryllium	0.00018J	mg/L	0.00050	03/05/21 17:23	
EPA 6020B	Boron	0.017J	mg/L	0.040	03/05/21 17:23	
SM 2450C-2011	Total Dissolved Solids	67.0	mg/L	10.0	03/04/21 14:30	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	03/06/21 22:32	
EPA 300.0 Rev 2.1 1993	Sulfate	6.0	mg/L	1.0	03/06/21 22:32	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525335

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335006	**YGWA-30I**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.78	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	1.2	mg/L	1.0	03/09/21 03:00	
EPA 6020B	Barium	0.0070	mg/L	0.0050	03/05/21 17:58	
EPA 6020B	Cobalt	0.0061	mg/L	0.0050	03/05/21 17:58	
EPA 6020B	Lithium	0.0011J	mg/L	0.030	03/05/21 17:58	
SM 2450C-2011	Total Dissolved Solids	23.0	mg/L	10.0	03/04/21 10:19	D6
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	03/06/21 22:47	
EPA 300.0 Rev 2.1 1993	Sulfate	0.88J	mg/L	1.0	03/06/21 22:47	
92525335007	**FB-01**					
EPA 6010D	Calcium	34.4	mg/L	1.0	03/09/21 03:05	
EPA 6020B	Barium	0.022	mg/L	0.0050	03/05/21 18:04	
EPA 6020B	Chromium	0.00062J	mg/L	0.0050	03/05/21 18:04	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/05/21 18:04	
SM 2450C-2011	Total Dissolved Solids	65.0	mg/L	10.0	03/05/21 11:04	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	03/06/21 23:01	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	03/06/21 23:01	
92525335008	**DUP-01**					
EPA 6010D	Calcium	1.2	mg/L	1.0	03/09/21 03:20	
EPA 6020B	Barium	0.0078	mg/L	0.0050	03/05/21 18:09	
EPA 6020B	Beryllium	0.00020J	mg/L	0.00050	03/05/21 18:09	
EPA 6020B	Boron	0.016J	mg/L	0.040	03/05/21 18:09	
SM 2450C-2011	Total Dissolved Solids	32.0	mg/L	10.0	03/05/21 11:04	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	03/06/21 23:16	
EPA 300.0 Rev 2.1 1993	Sulfate	6.1	mg/L	1.0	03/06/21 23:16	
92525335011	**YGWA-40**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.23	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	4.6	mg/L	1.0	03/10/21 05:29	
EPA 6020B	Barium	0.032	mg/L	0.0050	03/09/21 15:48	
EPA 6020B	Beryllium	0.00021J	mg/L	0.00050	03/09/21 15:48	
EPA 6020B	Boron	0.078	mg/L	0.040	03/09/21 15:48	
SM 2450C-2011	Total Dissolved Solids	57.0	mg/L	10.0	03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	03/13/21 17:54	
EPA 300.0 Rev 2.1 1993	Sulfate	21.5	mg/L	1.0	03/13/21 17:54	
92525335012	**YGWA-17S**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.52	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	2.5	mg/L	1.0	03/10/21 05:59	
EPA 6020B	Barium	0.017	mg/L	0.0050	03/09/21 15:54	
EPA 6020B	Beryllium	0.000099J	mg/L	0.00050	03/09/21 15:54	
EPA 6020B	Boron	0.010J	mg/L	0.040	03/09/21 15:54	
EPA 6020B	Chromium	0.00082J	mg/L	0.0050	03/09/21 15:54	

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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525335

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335012	**YGWA-17S**					
SM 2450C-2011	Total Dissolved Solids	57.0	mg/L	10.0	03/05/21 15:36	
EPA 300.0 Rev 2.1 1993	Chloride	7.1	mg/L	1.0	03/13/21 18:10	
EPA 300.0 Rev 2.1 1993	Sulfate	5.2	mg/L	1.0	03/13/21 18:10	
92525335013	**YGWA-18S**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.31	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	0.96J	mg/L	1.0	03/10/21 06:03	
EPA 6020B	Antimony	0.00067J	mg/L	0.0030	03/09/21 16:17	
EPA 6020B	Barium	0.017	mg/L	0.0050	03/09/21 16:17	
EPA 6020B	Beryllium	0.00011J	mg/L	0.00050	03/09/21 16:17	
EPA 6020B	Boron	0.0094J	mg/L	0.040	03/09/21 16:17	
EPA 6020B	Chromium	0.0010J	mg/L	0.0050	03/09/21 16:17	
EPA 6020B	Lead	0.000076J	mg/L	0.0010	03/09/21 16:17	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	03/09/21 16:17	
SM 2450C-2011	Total Dissolved Solids	37.0	mg/L	10.0	03/05/21 15:36	
EPA 300.0 Rev 2.1 1993	Chloride	7.2	mg/L	1.0	03/13/21 18:56	
EPA 300.0 Rev 2.1 1993	Sulfate	1.0	mg/L	1.0	03/13/21 18:56	
92525335014	**YGWA-18I**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.89	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	5.2	mg/L	1.0	03/10/21 06:08	
EPA 6020B	Barium	0.023	mg/L	0.0050	03/09/21 16:23	
EPA 6020B	Chromium	0.00087J	mg/L	0.0050	03/09/21 16:23	
EPA 6020B	Lithium	0.0034J	mg/L	0.030	03/09/21 16:23	
SM 2450C-2011	Total Dissolved Solids	95.0	mg/L	10.0	03/06/21 13:09	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	03/13/21 19:12	
92525335015	**YGWA-39**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.54	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	8.2	mg/L	1.0	03/10/21 06:13	
EPA 6020B	Barium	0.028	mg/L	0.0050	03/09/21 16:28	
EPA 6020B	Boron	0.033J	mg/L	0.040	03/09/21 16:28	
EPA 6020B	Cadmium	0.00030J	mg/L	0.00050	03/09/21 16:28	
EPA 6020B	Cobalt	0.00071J	mg/L	0.0050	03/09/21 16:28	
EPA 6020B	Lithium	0.0084J	mg/L	0.030	03/09/21 16:28	
EPA 6020B	Molybdenum	0.0014J	mg/L	0.010	03/09/21 16:28	
SM 2450C-2011	Total Dissolved Solids	168	mg/L	10.0	03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	4.9	mg/L	1.0	03/13/21 19:28	
EPA 300.0 Rev 2.1 1993	Sulfate	12.0	mg/L	1.0	03/13/21 19:28	
92525335016	**YGWA-1D (030321)**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	7.20	Std. Units		03/08/21 09:07	

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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525335

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335016	**YGWA-1D (030321)**					
EPA 6010D	Calcium	14.1	mg/L	1.0	03/10/21 06:18	
EPA 6020B	Barium	0.0068	mg/L	0.0050	03/09/21 17:01	
EPA 6020B	Lead	0.000056J	mg/L	0.0010	03/09/21 17:01	
EPA 6020B	Lithium	0.012J	mg/L	0.030	03/09/21 17:01	
EPA 6020B	Molybdenum	0.0088J	mg/L	0.010	03/09/21 17:01	
SM 2450C-2011	Total Dissolved Solids	99.0	mg/L	10.0	03/06/21 13:09	
EPA 300.0 Rev 2.1 1993	Chloride	0.96J	mg/L	1.0	03/13/21 19:43	
EPA 300.0 Rev 2.1 1993	Fluoride	0.078J	mg/L	0.10	03/13/21 19:43	
EPA 300.0 Rev 2.1 1993	Sulfate	9.0	mg/L	1.0	03/13/21 19:43	
92525335017	**YGWA-1I (030321)**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.38	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	1.8	mg/L	1.0	03/10/21 06:23	
EPA 6020B	Barium	0.0094	mg/L	0.0050	03/09/21 17:07	
EPA 6020B	Cobalt	0.0030J	mg/L	0.0050	03/09/21 17:07	
EPA 6020B	Lithium	0.0025J	mg/L	0.030	03/09/21 17:07	
EPA 6020B	Molybdenum	0.0049J	mg/L	0.010	03/09/21 17:07	
SM 2450C-2011	Total Dissolved Solids	39.0	mg/L	10.0	03/06/21 13:09	
EPA 300.0 Rev 2.1 1993	Chloride	1.2	mg/L	1.0	03/13/21 19:59	
EPA 300.0 Rev 2.1 1993	Sulfate	4.4	mg/L	1.0	03/13/21 19:59	
92525335018	**YGWA-2I (030321)**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	7.92	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	25.6	mg/L	1.0	03/10/21 06:28	
EPA 6020B	Arsenic	0.00098J	mg/L	0.0050	03/09/21 17:12	
EPA 6020B	Barium	0.0041J	mg/L	0.0050	03/09/21 17:12	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/09/21 17:12	
EPA 6020B	Molybdenum	0.0074J	mg/L	0.010	03/09/21 17:12	
SM 2450C-2011	Total Dissolved Solids	138	mg/L	10.0	03/06/21 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	0.86J	mg/L	1.0	03/13/21 20:14	
EPA 300.0 Rev 2.1 1993	Fluoride	0.085J	mg/L	0.10	03/13/21 20:14	
EPA 300.0 Rev 2.1 1993	Sulfate	10.6	mg/L	1.0	03/13/21 20:14	
92525335019	**YGWA-3I (030321)**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	8.23	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	20.6	mg/L	1.0	03/10/21 06:32	
EPA 6020B	Barium	0.0031J	mg/L	0.0050	03/09/21 17:18	
EPA 6020B	Lithium	0.017J	mg/L	0.030	03/09/21 17:18	
EPA 6020B	Molybdenum	0.0036J	mg/L	0.010	03/09/21 17:18	
SM 2450C-2011	Total Dissolved Solids	111	mg/L	10.0	03/06/21 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	0.99J	mg/L	1.0	03/13/21 21:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	03/13/21 21:00	
EPA 300.0 Rev 2.1 1993	Sulfate	9.6	mg/L	1.0	03/13/21 21:00	M1

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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525335

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335020	**YGWA-3D (030321)**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	8.39	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	29.8	mg/L	1.0	03/10/21 06:47	
EPA 6020B	Barium	0.0064	mg/L	0.0050	03/09/21 17:24	
EPA 6020B	Lithium	0.024J	mg/L	0.030	03/09/21 17:24	
EPA 6020B	Molybdenum	0.013	mg/L	0.010	03/09/21 17:24	
SM 2450C-2011	Total Dissolved Solids	137	mg/L	10.0	03/06/21 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	03/13/21 22:18	
EPA 300.0 Rev 2.1 1993	Fluoride	0.44	mg/L	0.10	03/13/21 22:18	
EPA 300.0 Rev 2.1 1993	Sulfate	7.0	mg/L	1.0	03/13/21 22:18	
92525335021	**EB-02 (03032021)**					
EPA 6010D	Calcium	33.3	mg/L	1.0	03/10/21 06:52	
EPA 6020B	Barium	0.023	mg/L	0.0050	03/09/21 17:29	
EPA 6020B	Chromium	0.00057J	mg/L	0.0050	03/09/21 17:29	
EPA 6020B	Lithium	0.0016J	mg/L	0.030	03/09/21 17:29	
SM 2450C-2011	Total Dissolved Solids	102	mg/L	10.0	03/06/21 13:10	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	03/13/21 22:33	
EPA 300.0 Rev 2.1 1993	Sulfate	2.2	mg/L	1.0	03/13/21 22:33	
92525335022	**YGWA-4I**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	6.21	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	7.7	mg/L	1.0	03/10/21 06:56	
EPA 6020B	Barium	0.014	mg/L	0.0050	03/09/21 17:35	
EPA 6020B	Boron	0.0056J	mg/L	0.040	03/09/21 17:35	
EPA 6020B	Chromium	0.0013J	mg/L	0.0050	03/09/21 17:35	
EPA 6020B	Lithium	0.012J	mg/L	0.030	03/09/21 17:35	
EPA 6020B	Selenium	0.0019J	mg/L	0.0050	03/09/21 17:35	
SM 2450C-2011	Total Dissolved Solids	80.0	mg/L	10.0	03/06/21 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	03/13/21 22:49	
EPA 300.0 Rev 2.1 1993	Sulfate	7.8	mg/L	1.0	03/13/21 22:49	
92525335023	**YGWA-20S**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	5.89	Std. Units		03/08/21 09:07	
EPA 6010D	Calcium	2.4	mg/L	1.0	03/10/21 07:01	
EPA 6020B	Barium	0.015	mg/L	0.0050	03/09/21 17:56	
EPA 6020B	Beryllium	0.000068J	mg/L	0.00050	03/09/21 17:56	
EPA 6020B	Lead	0.000045J	mg/L	0.0010	03/09/21 17:56	
SM 2450C-2011	Total Dissolved Solids	53.0	mg/L	10.0	03/06/21 13:11	
EPA 300.0 Rev 2.1 1993	Chloride	2.7	mg/L	1.0	03/13/21 23:04	
92525335024	**YGWA-21I**					
	Performed by	CUSTOMER			03/08/21 09:07	
	pH	6.80	Std. Units		03/08/21 09:07	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92525335

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525335024	**YGWA-21I**					
EPA 6010D	Calcium	8.7	mg/L	1.0	03/10/21 07:06	
EPA 6020B	Antimony	0.0014J	mg/L	0.0030	03/09/21 18:02	
EPA 6020B	Arsenic	0.00078J	mg/L	0.0050	03/09/21 18:02	
EPA 6020B	Barium	0.011	mg/L	0.0050	03/09/21 18:02	
EPA 6020B	Boron	0.0079J	mg/L	0.040	03/09/21 18:02	
EPA 6020B	Cobalt	0.0065	mg/L	0.0050	03/09/21 18:02	
EPA 6020B	Lithium	0.0062J	mg/L	0.030	03/09/21 18:02	
SM 2450C-2011	Total Dissolved Solids	110	mg/L	10.0	03/06/21 12:32	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	03/13/21 23:20	
EPA 300.0 Rev 2.1 1993	Fluoride	0.091J	mg/L	0.10	03/13/21 23:20	
EPA 300.0 Rev 2.1 1993	Sulfate	4.5	mg/L	1.0	03/13/21 23:20	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-5I **Lab ID: 92525335001** Collected: 03/02/21 14:05 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.63**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.6**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:21	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 16:43	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 16:43	7440-38-2	
Barium	**0.019**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 16:43	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 16:43	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 16:43	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 16:43	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 16:43	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 16:43	7440-48-4	
Lead	**0.000092J**	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 16:43	7439-92-1	
Lithium	**0.0031J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 16:43	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 16:43	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 16:43	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 10:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**67.0**	mg/L	10.0	10.0	1		03/04/21 14:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.3**	mg/L	1.0	0.60	1		03/06/21 20:37	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 20:37	16984-48-8	
Sulfate	**2.3**	mg/L	1.0	0.50	1		03/06/21 20:37	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-5D **Lab ID: 92525335002** Collected: 03/02/21 14:40 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**7.15**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.6**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:41	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 16:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 16:49	7440-38-2	
Barium	**0.014**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 16:49	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 16:49	7440-41-7	
Boron	**0.0068J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 16:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 16:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 16:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 16:49	7440-48-4	
Lead	**0.000051J**	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 16:49	7439-92-1	
Lithium	**0.0018J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 16:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 16:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 16:49	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 10:55	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**52.0**	mg/L	10.0	10.0	1		03/04/21 14:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.2**	mg/L	1.0	0.60	1		03/06/21 21:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 21:49	16984-48-8	
Sulfate	**2.6**	mg/L	1.0	0.50	1		03/06/21 21:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: DUP-1 **Lab ID: 92525335003** Collected: 03/02/21 00:00 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.5**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:46	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0015J**	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 17:11	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 17:11	7440-38-2	
Barium	**0.014**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 17:11	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 17:11	7440-41-7	
Boron	**0.013J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 17:11	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 17:11	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 17:11	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 17:11	7440-48-4	
Lead	**0.000069J**	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 17:11	7439-92-1	
Lithium	**0.0016J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 17:11	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 17:11	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 17:11	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 10:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**48.0**	mg/L	10.0	10.0	1		03/04/21 14:30		
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		03/06/21 22:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 22:04	16984-48-8	
Sulfate	**2.0**	mg/L	1.0	0.50	1		03/06/21 22:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-14S **Lab ID: 92525335005** Collected: 03/02/21 11:20 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.49**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.2**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 02:56	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 17:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 17:23	7440-38-2	
Barium	**0.0076**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 17:23	7440-39-3	
Beryllium	**0.00018J**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 17:23	7440-41-7	
Boron	**0.017J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 17:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 17:23	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 17:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 17:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 17:23	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 17:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 17:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 17:23	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**67.0**	mg/L	10.0	10.0	1		03/04/21 14:30		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.9**	mg/L	1.0	0.60	1		03/06/21 22:32	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 22:32	16984-48-8	
Sulfate	**6.0**	mg/L	1.0	0.50	1		03/06/21 22:32	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-30I **Lab ID: 92525335006** Collected: 03/01/21 16:25 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.78**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.2**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:00	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 17:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 17:58	7440-38-2	
Barium	**0.0070**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 17:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 17:58	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 17:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 17:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 17:58	7440-47-3	
Cobalt	**0.0061**	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 17:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 17:58	7439-92-1	
Lithium	**0.0011J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 17:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 17:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 17:58	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**23.0**	mg/L	10.0	10.0	1		03/04/21 10:19		D6
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	mg/L	1.0	0.60	1		03/06/21 22:47	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 22:47	16984-48-8	
Sulfate	**0.88J**	mg/L	1.0	0.50	1		03/06/21 22:47	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: FB-01 **Lab ID: 92525335007** Collected: 03/02/21 11:30 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**34.4**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:05	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/04/21 11:29	03/05/21 18:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:04	7440-38-2	
Barium	**0.022**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:04	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:04	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:04	7440-43-9	
Chromium	**0.00062J**	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:04	7439-92-1	
Lithium	**0.0016J**	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 18:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:04	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 11:07	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**65.0**	mg/L	10.0	10.0	1		03/05/21 11:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	mg/L	1.0	0.60	1		03/06/21 23:01	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 23:01	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	0.50	1		03/06/21 23:01	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: DUP-01 **Lab ID: 92525335008** Collected: 03/02/21 00:00 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.2**	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:20	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	0.00028	1	03/04/21 11:29	03/05/21 18:09	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:09	7440-38-2	
Barium	**0.0078**	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:09	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:09	7440-41-7	
Boron	**0.016J**	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:09	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:09	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:09	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:09	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:09	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:09	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 18:09	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:09	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 11:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**32.0**	mg/L	10.0	10.0	1		03/05/21 11:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.0**	mg/L	1.0	0.60	1		03/06/21 23:16	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 23:16	16984-48-8	
Sulfate	**6.1**	mg/L	1.0	0.50	1		03/06/21 23:16	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: FB-01 **Lab ID: 92525335009** Collected: 03/02/21 15:20 Received: 03/02/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.070	1	03/04/21 11:30	03/09/21 03:24	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	0.00028	1	03/04/21 11:29	03/05/21 18:15	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/04/21 11:29	03/05/21 18:15	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	03/04/21 11:29	03/05/21 18:15	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/04/21 11:29	03/05/21 18:15	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/04/21 11:29	03/05/21 18:15	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/04/21 11:29	03/05/21 18:15	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/04/21 11:29	03/05/21 18:15	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/04/21 11:29	03/05/21 18:15	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/04/21 11:29	03/05/21 18:15	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/04/21 11:29	03/05/21 18:15	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/04/21 11:29	03/05/21 18:15	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/04/21 11:29	03/05/21 18:15	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/04/21 14:15	03/05/21 11:11	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		03/05/21 11:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		03/06/21 23:30	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/06/21 23:30	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/06/21 23:30	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-40 **Lab ID: 92525335011** Collected: 03/04/21 10:10 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.23**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**4.6**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 05:29	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	0.00028	1	03/08/21 11:57	03/09/21 15:48	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 15:48	7440-38-2	
Barium	**0.032**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 15:48	7440-39-3	
Beryllium	**0.00021J**	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 15:48	7440-41-7	
Boron	**0.078**	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 15:48	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 15:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 15:48	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 15:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 15:48	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 15:48	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 15:48	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 15:48	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 10:52	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**57.0**	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.9**	mg/L	1.0	0.60	1		03/13/21 17:54	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 17:54	16984-48-8	
Sulfate	**21.5**	mg/L	1.0	0.50	1		03/13/21 17:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-17S **Lab ID: 92525335012** Collected: 03/03/21 12:20 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.52**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.5**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 05:59	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 15:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 15:54	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 15:54	7440-39-3	
Beryllium	**0.000099J**	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 15:54	7440-41-7	
Boron	**0.010J**	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 15:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 15:54	7440-43-9	
Chromium	**0.00082J**	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 15:54	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 15:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 15:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 15:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 15:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 15:54	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 10:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**57.0**	mg/L	10.0	10.0	1		03/05/21 15:36		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.1**	mg/L	1.0	0.60	1		03/13/21 18:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 18:10	16984-48-8	
Sulfate	**5.2**	mg/L	1.0	0.50	1		03/13/21 18:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-18S **Lab ID: 92525335013** Collected: 03/03/21 13:50 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.31**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**0.96J**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:03	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00067J**	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 16:17	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 16:17	7440-38-2	
Barium	**0.017**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 16:17	7440-39-3	
Beryllium	**0.00011J**	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 16:17	7440-41-7	
Boron	**0.0094J**	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 16:17	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 16:17	7440-43-9	
Chromium	**0.0010J**	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 16:17	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 16:17	7440-48-4	
Lead	**0.000076J**	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 16:17	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 16:17	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 16:17	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 16:17	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 10:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**37.0**	mg/L	10.0	10.0	1		03/05/21 15:36		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.2**	mg/L	1.0	0.60	1		03/13/21 18:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 18:56	16984-48-8	
Sulfate	**1.0**	mg/L	1.0	0.50	1		03/13/21 18:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-18I **Lab ID: 92525335014** Collected: 03/03/21 15:00 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.89**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.2**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:08	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	0.00028	1	03/08/21 11:57	03/09/21 16:23	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 16:23	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 16:23	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 16:23	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 16:23	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 16:23	7440-43-9	
Chromium	**0.00087J**	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 16:23	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 16:23	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 16:23	7439-92-1	
Lithium	**0.0034J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 16:23	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 16:23	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 16:23	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 10:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**95.0**	mg/L	10.0	10.0	1		03/06/21 13:09		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.0**	mg/L	1.0	0.60	1		03/13/21 19:12	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 19:12	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/13/21 19:12	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-39 **Lab ID: 92525335015** Collected: 03/04/21 10:20 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.54**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**8.2**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:13	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 16:28	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 16:28	7440-38-2	
Barium	**0.028**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 16:28	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 16:28	7440-41-7	
Boron	**0.033J**	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 16:28	7440-42-8	
Cadmium	**0.00030J**	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 16:28	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 16:28	7440-47-3	
Cobalt	**0.00071J**	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 16:28	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 16:28	7439-92-1	
Lithium	**0.0084J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 16:28	7439-93-2	
Molybdenum	**0.0014J**	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 16:28	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 16:28	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:01	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**168**	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.9**	mg/L	1.0	0.60	1		03/13/21 19:28	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 19:28	16984-48-8	
Sulfate	**12.0**	mg/L	1.0	0.50	1		03/13/21 19:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-1D (030321) **Lab ID: 92525335016** Collected: 03/03/21 14:25 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**7.20**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**14.1**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:18	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	0.00028	1	03/08/21 11:57	03/09/21 17:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:01	7440-38-2	
Barium	**0.0068**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:01	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:01	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:01	7440-48-4	
Lead	**0.000056J**	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:01	7439-92-1	
Lithium	**0.012J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:01	7439-93-2	
Molybdenum	**0.0088J**	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:01	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**99.0**	mg/L	10.0	10.0	1		03/06/21 13:09		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.96J**	mg/L	1.0	0.60	1		03/13/21 19:43	16887-00-6	
Fluoride	**0.078J**	mg/L	0.10	0.050	1		03/13/21 19:43	16984-48-8	
Sulfate	**9.0**	mg/L	1.0	0.50	1		03/13/21 19:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-1I (030321) **Lab ID: 92525335017** Collected: 03/03/21 13:35 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.38**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.8**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:23	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	0.00028	1	03/08/21 11:57	03/09/21 17:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:07	7440-38-2	
Barium	**0.0094**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:07	7440-47-3	
Cobalt	**0.0030J**	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:07	7439-92-1	
Lithium	**0.0025J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:07	7439-93-2	
Molybdenum	**0.0049J**	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:07	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**39.0**	mg/L	10.0	10.0	1		03/06/21 13:09		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.2**	mg/L	1.0	0.60	1		03/13/21 19:59	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 19:59	16984-48-8	
Sulfate	**4.4**	mg/L	1.0	0.50	1		03/13/21 19:59	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-2I (030321) **Lab ID: 92525335018** Collected: 03/03/21 11:45 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**7.92**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**25.6**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:28	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	0.00028	1	03/08/21 11:57	03/09/21 17:12	7440-36-0	
Arsenic	**0.00098J**	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:12	7440-38-2	
Barium	**0.0041J**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:12	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:12	7439-92-1	
Lithium	**0.0016J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:12	7439-93-2	
Molybdenum	**0.0074J**	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:12	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**138**	mg/L	10.0	10.0	1		03/06/21 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.86J**	mg/L	1.0	0.60	1		03/13/21 20:14	16887-00-6	
Fluoride	**0.085J**	mg/L	0.10	0.050	1		03/13/21 20:14	16984-48-8	
Sulfate	**10.6**	mg/L	1.0	0.50	1		03/13/21 20:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-3I (030321) **Lab ID: 92525335019** Collected: 03/03/21 17:00 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**8.23**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**20.6**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:32	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:18	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:18	7440-38-2	
Barium	**0.0031J**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:18	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:18	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:18	7439-92-1	
Lithium	**0.017J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:18	7439-93-2	
Molybdenum	**0.0036J**	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:18	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**111**	mg/L	10.0	10.0	1		03/06/21 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.99J**	mg/L	1.0	0.60	1		03/13/21 21:00	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		03/13/21 21:00	16984-48-8	
Sulfate	**9.6**	mg/L	1.0	0.50	1		03/13/21 21:00	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-3D (030321) **Lab ID: 92525335020** Collected: 03/03/21 16:00 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**8.39**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**29.8**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:47	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	0.00028	1	03/08/21 11:57	03/09/21 17:24	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:24	7440-38-2	
Barium	**0.0064**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:24	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:24	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:24	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:24	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:24	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:24	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:24	7439-92-1	
Lithium	**0.024J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:24	7439-93-2	
Molybdenum	**0.013**	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:24	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:24	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**137**	mg/L	10.0	10.0	1		03/06/21 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		03/13/21 22:18	16887-00-6	
Fluoride	**0.44**	mg/L	0.10	0.050	1		03/13/21 22:18	16984-48-8	
Sulfate	**7.0**	mg/L	1.0	0.50	1		03/13/21 22:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: EB-02 (03032021) **Lab ID: 92525335021** Collected: 03/03/21 17:15 Received: 03/05/21 09:20 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	**33.3**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:52	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:29	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:29	7440-38-2	
Barium	**0.023**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:29	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:29	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:29	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:29	7440-43-9	
Chromium	**0.00057J**	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:29	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:29	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:29	7439-92-1	
Lithium	**0.0016J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:29	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:29	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:29	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	03/08/21 11:57	03/09/21 17:29	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**102**	mg/L	10.0	10.0	1		03/06/21 13:10		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	mg/L	1.0	0.60	1		03/13/21 22:33	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 22:33	16984-48-8	
Sulfate	**2.2**	mg/L	1.0	0.50	1		03/13/21 22:33	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-4I **Lab ID: 92525335022** Collected: 03/03/21 10:35 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**6.21**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**7.7**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 06:56	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:35	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:35	7440-38-2	
Barium	**0.014**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:35	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:35	7440-41-7	
Boron	**0.0056J**	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:35	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:35	7440-43-9	
Chromium	**0.0013J**	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:35	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:35	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:35	7439-92-1	
Lithium	**0.012J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:35	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:35	7439-98-7	
Selenium	**0.0019J**	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:35	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:11	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**80.0**	mg/L	10.0	10.0	1		03/06/21 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		03/13/21 22:49	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 22:49	16984-48-8	
Sulfate	**7.8**	mg/L	1.0	0.50	1		03/13/21 22:49	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-20S **Lab ID: 92525335023** Collected: 03/03/21 09:40 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**5.89**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.4**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 07:01	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 17:56	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 17:56	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 17:56	7440-39-3	
Beryllium	**0.000068J**	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 17:56	7440-41-7	
Boron	ND	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 17:56	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 17:56	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 17:56	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 17:56	7440-48-4	
Lead	**0.000045J**	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 17:56	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 17:56	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 17:56	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 17:56	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**53.0**	mg/L	10.0	10.0	1		03/06/21 13:11		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.7**	mg/L	1.0	0.60	1		03/13/21 23:04	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		03/13/21 23:04	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		03/13/21 23:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92525335

Sample: YGWA-21I **Lab ID: 92525335024** Collected: 03/04/21 09:35 Received: 03/05/21 09:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		03/08/21 09:07		
pH	**6.80**	Std. Units			1		03/08/21 09:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**8.7**	mg/L	1.0	0.070	1	03/08/21 10:47	03/10/21 07:06	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0014J**	mg/L	0.0030	0.00028	1	03/08/21 11:57	03/09/21 18:02	7440-36-0	
Arsenic	**0.00078J**	mg/L	0.0050	0.00078	1	03/08/21 11:57	03/09/21 18:02	7440-38-2	
Barium	**0.011**	mg/L	0.0050	0.00071	1	03/08/21 11:57	03/09/21 18:02	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	03/08/21 11:57	03/09/21 18:02	7440-41-7	
Boron	**0.0079J**	mg/L	0.040	0.0052	1	03/08/21 11:57	03/09/21 18:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	03/08/21 11:57	03/09/21 18:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	03/08/21 11:57	03/09/21 18:02	7440-47-3	
Cobalt	**0.0065**	mg/L	0.0050	0.00038	1	03/08/21 11:57	03/09/21 18:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	03/08/21 11:57	03/09/21 18:02	7439-92-1	
Lithium	**0.0062J**	mg/L	0.030	0.00081	1	03/08/21 11:57	03/09/21 18:02	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	03/08/21 11:57	03/09/21 18:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	03/08/21 11:57	03/09/21 18:02	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	03/08/21 13:30	03/09/21 11:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2450C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**110**	mg/L	10.0	10.0	1		03/06/21 12:32		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.8**	mg/L	1.0	0.60	1		03/13/21 23:20	16887-00-6	
Fluoride	**0.091J**	mg/L	0.10	0.050	1		03/13/21 23:20	16984-48-8	
Sulfate	**4.5**	mg/L	1.0	0.50	1		03/13/21 23:20	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604223 | Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A | Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008, 92525335009

METHOD BLANK: 3183140 Matrix: Water
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008, 92525335009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/09/21 01:57	

LABORATORY CONTROL SAMPLE: 3183141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183142 3183143

Parameter	Units	92525335001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	2.6	1	1	3.6	3.5	105	94	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604893
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

METHOD BLANK: 3186898 Matrix: Water
Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.070	03/10/21 05:19	

LABORATORY CONTROL SAMPLE: 3186899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	0.98J	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3186900 3186901

Parameter	Units	92525335011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	4.6	1	1	5.5	5.4	92	76	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604224
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008, 92525335009

METHOD BLANK: 3183148 Matrix: Water
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008, 92525335009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/05/21 16:31	
Arsenic	mg/L	ND	0.0050	0.00078	03/05/21 16:31	
Barium	mg/L	ND	0.0050	0.00071	03/05/21 16:31	
Beryllium	mg/L	ND	0.00050	0.000046	03/05/21 16:31	
Boron	mg/L	ND	0.040	0.0052	03/05/21 16:31	
Cadmium	mg/L	ND	0.00050	0.00012	03/05/21 16:31	
Chromium	mg/L	ND	0.0050	0.00055	03/05/21 16:31	
Cobalt	mg/L	ND	0.0050	0.00038	03/05/21 16:31	
Lead	mg/L	ND	0.0010	0.000036	03/05/21 16:31	
Lithium	mg/L	ND	0.030	0.00081	03/05/21 16:31	
Molybdenum	mg/L	ND	0.010	0.00069	03/05/21 16:31	
Selenium	mg/L	ND	0.0050	0.0016	03/05/21 16:31	

LABORATORY CONTROL SAMPLE: 3183149

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.91	91	80-120	
Cadmium	mg/L	0.1	0.096	96	80-120	
Chromium	mg/L	0.1	0.096	96	80-120	
Cobalt	mg/L	0.1	0.096	96	80-120	
Lead	mg/L	0.1	0.097	97	80-120	
Lithium	mg/L	0.1	0.098	98	80-120	
Molybdenum	mg/L	0.1	0.10	100	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183150 3183151

Parameter	Units	92525335002 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	105	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.096	0.093	96	93	75-125	3	20	
Barium	mg/L	0.014	0.1	0.1	0.11	0.11	96	99	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183150 3183151

Parameter	Units	92525335002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	ND	0.1	0.1	0.095	0.093	95	93	75-125	2	20	
Boron	mg/L	0.0068J	1	1	0.96	0.96	96	96	75-125	0	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.098	99	98	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.099	0.097	99	97	75-125	2	20	
Lead	mg/L	0.000051J	0.1	0.1	0.098	0.095	98	95	75-125	3	20	
Lithium	mg/L	0.0018J	0.1	0.1	0.10	0.097	98	95	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.094	0.092	94	92	75-125	2	20	

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604916
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

METHOD BLANK: 3187128 Matrix: Water
Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00028	03/09/21 15:37	
Arsenic	mg/L	ND	0.0050	0.00078	03/09/21 15:37	
Barium	mg/L	ND	0.0050	0.00071	03/09/21 15:37	
Beryllium	mg/L	ND	0.00050	0.000046	03/09/21 15:37	
Boron	mg/L	ND	0.040	0.0052	03/09/21 15:37	
Cadmium	mg/L	ND	0.00050	0.00012	03/09/21 15:37	
Chromium	mg/L	ND	0.0050	0.00055	03/09/21 15:37	
Cobalt	mg/L	ND	0.0050	0.00038	03/09/21 15:37	
Lead	mg/L	ND	0.0010	0.000036	03/09/21 15:37	
Lithium	mg/L	ND	0.030	0.00081	03/09/21 15:37	
Molybdenum	mg/L	ND	0.010	0.00069	03/09/21 15:37	
Selenium	mg/L	ND	0.0050	0.0016	03/09/21 15:37	
Thallium	mg/L	ND	0.0010	0.00014	03/09/21 15:37	

LABORATORY CONTROL SAMPLE: 3187129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.097	97	80-120	
Arsenic	mg/L	0.1	0.093	93	80-120	
Barium	mg/L	0.1	0.094	94	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	104	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.10	102	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	104	80-120	
Molybdenum	mg/L	0.1	0.094	94	80-120	
Selenium	mg/L	0.1	0.091	91	80-120	
Thallium	mg/L	0.1	0.092	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3187130 3187131

Parameter	Units	92525335012 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	0.094	0.096	94	96	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3187130 3187131

Parameter	Units	92525335012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.1	0.1	0.092	0.092	92	92	75-125	0	20	
Barium	mg/L	0.017	0.1	0.1	0.11	0.11	90	94	75-125	3	20	
Beryllium	mg/L	0.000099J	0.1	0.1	0.093	0.095	93	95	75-125	3	20	
Boron	mg/L	0.010J	1	1	0.98	0.99	97	98	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.095	0.096	95	96	75-125	1	20	
Chromium	mg/L	0.00082J	0.1	0.1	0.098	0.098	97	97	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.095	95	95	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Lithium	mg/L	ND	0.1	0.1	0.098	0.10	97	100	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.089	0.087	88	86	75-125	2	20	
Thallium	mg/L	ND	0.1	0.1	0.089	0.090	89	90	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604308 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335007, 92525335008, 92525335009

METHOD BLANK: 3183676 Matrix: Water
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335007, 92525335008, 92525335009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/05/21 10:07	

LABORATORY CONTROL SAMPLE: 3183677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0023	92	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3183678 3183679

Parameter	Units	92524632013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0026	0.0026	102	102	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604928
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335021, 92525335022, 92525335023, 92525335024

METHOD BLANK: 3187260 Matrix: Water
Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335021, 92525335022, 92525335023, 92525335024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	03/09/21 10:42	

LABORATORY CONTROL SAMPLE: 3187261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3187262 3187263

Parameter	Units	92525375013 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	0.0019	93	78	75-125	18	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604206
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335006

METHOD BLANK: 3183000 Matrix: Water
Associated Lab Samples: 92525335006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/04/21 10:17	

LABORATORY CONTROL SAMPLE: 3183001

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3183002

Parameter	Units	92525485001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	84.0	85.0	1	10	

SAMPLE DUPLICATE: 3183003

Parameter	Units	92525335006 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	23.0	41.0	56	10	D6

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604300 Analysis Method: SM 2450C-2011
QC Batch Method: SM 2450C-2011 Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005

METHOD BLANK: 3183609 Matrix: Water
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/04/21 14:27	

LABORATORY CONTROL SAMPLE: 3183610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3183611

Parameter	Units	92525102001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	175	171	2	10	

SAMPLE DUPLICATE: 3183612

Parameter	Units	92524831010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	513	520	1	10	

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(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604527 | Analysis Method: SM 2450C-2011
QC Batch Method: SM 2450C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335007, 92525335008, 92525335009

METHOD BLANK: 3184654 Matrix: Water
Associated Lab Samples: 92525335007, 92525335008, 92525335009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/05/21 11:03	

LABORATORY CONTROL SAMPLE: 3184655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	375	94	90-111	

SAMPLE DUPLICATE: 3184656

Parameter	Units	92525799001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2090	1960	6	10	

SAMPLE DUPLICATE: 3184657

Parameter	Units	92525341004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	167	152	9	10	

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604626
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335012, 92525335013

METHOD BLANK: 3185317 Matrix: Water
Associated Lab Samples: 92525335012, 92525335013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/05/21 15:33	

LABORATORY CONTROL SAMPLE: 3185318

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	390	98	90-111	

SAMPLE DUPLICATE: 3185319

Parameter	Units	92525822001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	274	290	6	10	

SAMPLE DUPLICATE: 3185328

Parameter	Units	92524831016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	325	354	9	10	

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604764
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335014, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023

METHOD BLANK: 3186295 Matrix: Water
Associated Lab Samples: 92525335014, 92525335016, 92525335017, 92525335018, 92525335019, 92525335020, 92525335021, 92525335022, 92525335023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/06/21 13:06	

LABORATORY CONTROL SAMPLE: 3186296

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	368	92	90-111	

SAMPLE DUPLICATE: 3186298

Parameter	Units	92525335021 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	102	101	1	10	

SAMPLE DUPLICATE: 3186336

Parameter	Units	92525919008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	267	283	6	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604765
QC Batch Method: SM 2450C-2011
Analysis Method: SM 2450C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92525335011, 92525335015, 92525335024

METHOD BLANK: 3186310 Matrix: Water
Associated Lab Samples: 92525335011, 92525335015, 92525335024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	03/06/21 12:29	

LABORATORY CONTROL SAMPLE: 3186311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	371	93	90-111	

SAMPLE DUPLICATE: 3186312

Parameter	Units	92525346009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	217	220	1	10	

SAMPLE DUPLICATE: 3186313

Parameter	Units	92525824003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	45.0	61.0	30	10	D6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 604544
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: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008, 92525335009

METHOD BLANK: 3184710 Matrix: Water
Associated Lab Samples: 92525335001, 92525335002, 92525335003, 92525335005, 92525335006, 92525335007, 92525335008, 92525335009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/06/21 20:08	
Fluoride	mg/L	ND	0.10	0.050	03/06/21 20:08	
Sulfate	mg/L	ND	1.0	0.50	03/06/21 20:08	

LABORATORY CONTROL SAMPLE: 3184711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.3	97	90-110	
Fluoride	mg/L	2.5	2.5	98	90-110	
Sulfate	mg/L	50	48.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184712 3184713

Parameter	Units	92525335001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.3	50	50	53.4	53.9	98	99	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	104	105	90-110	1	10	
Sulfate	mg/L	2.3	50	50	51.8	52.4	99	100	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3184714 3184715

Parameter	Units	92525341001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.5	50	50	54.6	54.8	98	98	90-110	0	10	
Fluoride	mg/L	0.18	2.5	2.5	3.3	3.3	124	125	90-110	1	10	M1
Sulfate	mg/L	94.2	50	50	135	135	81	82	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 606455
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: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017, 92525335018

METHOD BLANK: 3195134 Matrix: Water
Associated Lab Samples: 92525335011, 92525335012, 92525335013, 92525335014, 92525335015, 92525335016, 92525335017, 92525335018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 12:45	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 12:45	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 12:45	

LABORATORY CONTROL SAMPLE: 3195135

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	2.6	103	90-110	
Sulfate	mg/L	50	52.8	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195136 3195137

Parameter	Units	92525912007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	50.5	51.0	101	102	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	102	103	90-110	1	10	
Sulfate	mg/L	ND	50	50	53.6	54.2	107	108	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195138 3195139

Parameter	Units	92525919009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.6	50	50	54.1	53.7	105	104	90-110	1	10	
Fluoride	mg/L	0.12	2.5	2.5	2.8	2.8	106	105	90-110	1	10	
Sulfate	mg/L	39.2	50	50	95.4	95.1	112	112	90-110	0	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92525335

QC Batch: 606456
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: 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

METHOD BLANK: 3195140 Matrix: Water
Associated Lab Samples: 92525335019, 92525335020, 92525335021, 92525335022, 92525335023, 92525335024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	03/13/21 20:29	
Fluoride	mg/L	ND	0.10	0.050	03/13/21 20:29	
Sulfate	mg/L	ND	1.0	0.50	03/13/21 20:29	

LABORATORY CONTROL SAMPLE: 3195141

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.5	97	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	51.4	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195142 3195143

Parameter	Units	92525335019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.99J	50	50	52.8	52.3	104	103	90-110	1	10	
Fluoride	mg/L	0.10	2.5	2.5	2.7	2.7	106	104	90-110	2	10	
Sulfate	mg/L	9.6	50	50	65.5	64.7	112	110	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3195144 3195145

Parameter	Units	92525346005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.6	50	50	66.4	68.7	100	104	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.6	98	103	90-110	5	10	
Sulfate	mg/L	88.8	50	50	115	117	53	56	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES
Pace Project No.: 92525335

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525335001	**YGWA-5I**				
92525335002	**YGWA-5D**				
92525335005	**YGWA-14S**				
92525335006	**YGWA-30I**				
92525335011	**YGWA-40**				
92525335012	**YGWA-17S**				
92525335013	**YGWA-18S**				
92525335014	**YGWA-18I**				
92525335015	**YGWA-39**				
92525335016	**YGWA-1D (030321)**				
92525335017	**YGWA-1I (030321)**				
92525335018	**YGWA-2I (030321)**				
92525335019	**YGWA-3I (030321)**				
92525335020	**YGWA-3D (030321)**				
92525335022	**YGWA-4I**				
92525335023	**YGWA-20S**				
92525335024	**YGWA-21I**				
92525335001	**YGWA-5I**	EPA 3010A	604223	EPA 6010D	604309
92525335002	**YGWA-5D**	EPA 3010A	604223	EPA 6010D	604309
92525335003	**DUP-1**	EPA 3010A	604223	EPA 6010D	604309
92525335005	**YGWA-14S**	EPA 3010A	604223	EPA 6010D	604309
92525335006	**YGWA-30I**	EPA 3010A	604223	EPA 6010D	604309
92525335007	**FB-01**	EPA 3010A	604223	EPA 6010D	604309
92525335008	**DUP-01**	EPA 3010A	604223	EPA 6010D	604309
92525335009	**FB-01**	EPA 3010A	604223	EPA 6010D	604309
92525335011	**YGWA-40**	EPA 3010A	604893	EPA 6010D	604969
92525335012	**YGWA-17S**	EPA 3010A	604893	EPA 6010D	604969
92525335013	**YGWA-18S**	EPA 3010A	604893	EPA 6010D	604969
92525335014	**YGWA-18I**	EPA 3010A	604893	EPA 6010D	604969
92525335015	**YGWA-39**	EPA 3010A	604893	EPA 6010D	604969
92525335016	**YGWA-1D (030321)**	EPA 3010A	604893	EPA 6010D	604969
92525335017	**YGWA-1I (030321)**	EPA 3010A	604893	EPA 6010D	604969
92525335018	**YGWA-2I (030321)**	EPA 3010A	604893	EPA 6010D	604969
92525335019	**YGWA-3I (030321)**	EPA 3010A	604893	EPA 6010D	604969
92525335020	**YGWA-3D (030321)**	EPA 3010A	604893	EPA 6010D	604969
92525335021	**EB-02 (03032021)**	EPA 3010A	604893	EPA 6010D	604969
92525335022	**YGWA-4I**	EPA 3010A	604893	EPA 6010D	604969
92525335023	**YGWA-20S**	EPA 3010A	604893	EPA 6010D	604969
92525335024	**YGWA-21I**	EPA 3010A	604893	EPA 6010D	604969
92525335001	**YGWA-5I**	EPA 3005A	604224	EPA 6020B	604329
92525335002	**YGWA-5D**	EPA 3005A	604224	EPA 6020B	604329
92525335003	**DUP-1**	EPA 3005A	604224	EPA 6020B	604329
92525335005	**YGWA-14S**	EPA 3005A	604224	EPA 6020B	604329
92525335006	**YGWA-30I**	EPA 3005A	604224	EPA 6020B	604329
92525335007	**FB-01**	EPA 3005A	604224	EPA 6020B	604329
92525335008	**DUP-01**	EPA 3005A	604224	EPA 6020B	604329
92525335009	**FB-01**	EPA 3005A	604224	EPA 6020B	604329

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525335011	**YGWA-40**	EPA 3005A	604916	EPA 6020B	605023
92525335012	**YGWA-17S**	EPA 3005A	604916	EPA 6020B	605023
92525335013	**YGWA-18S**	EPA 3005A	604916	EPA 6020B	605023
92525335014	**YGWA-18I**	EPA 3005A	604916	EPA 6020B	605023
92525335015	**YGWA-39**	EPA 3005A	604916	EPA 6020B	605023
92525335016	**YGWA-1D (030321)**	EPA 3005A	604916	EPA 6020B	605023
92525335017	**YGWA-1I (030321)**	EPA 3005A	604916	EPA 6020B	605023
92525335018	**YGWA-2I (030321)**	EPA 3005A	604916	EPA 6020B	605023
92525335019	**YGWA-3I (030321)**	EPA 3005A	604916	EPA 6020B	605023
92525335020	**YGWA-3D (030321)**	EPA 3005A	604916	EPA 6020B	605023
92525335021	**EB-02 (03032021)**	EPA 3005A	604916	EPA 6020B	605023
92525335022	**YGWA-4I**	EPA 3005A	604916	EPA 6020B	605023
92525335023	**YGWA-20S**	EPA 3005A	604916	EPA 6020B	605023
92525335024	**YGWA-21I**	EPA 3005A	604916	EPA 6020B	605023
92525335001	**YGWA-5I**	EPA 7470A	604308	EPA 7470A	604504
92525335002	**YGWA-5D**	EPA 7470A	604308	EPA 7470A	604504
92525335003	**DUP-1**	EPA 7470A	604308	EPA 7470A	604504
92525335007	**FB-01**	EPA 7470A	604308	EPA 7470A	604504
92525335008	**DUP-01**	EPA 7470A	604308	EPA 7470A	604504
92525335009	**FB-01**	EPA 7470A	604308	EPA 7470A	604504
92525335011	**YGWA-40**	EPA 7470A	604928	EPA 7470A	605029
92525335012	**YGWA-17S**	EPA 7470A	604928	EPA 7470A	605029
92525335013	**YGWA-18S**	EPA 7470A	604928	EPA 7470A	605029
92525335014	**YGWA-18I**	EPA 7470A	604928	EPA 7470A	605029
92525335015	**YGWA-39**	EPA 7470A	604928	EPA 7470A	605029
92525335021	**EB-02 (03032021)**	EPA 7470A	604928	EPA 7470A	605029
92525335022	**YGWA-4I**	EPA 7470A	604928	EPA 7470A	605029
92525335023	**YGWA-20S**	EPA 7470A	604928	EPA 7470A	605029
92525335024	**YGWA-21I**	EPA 7470A	604928	EPA 7470A	605029
92525335001	**YGWA-5I**	SM 2450C-2011	604300		
92525335002	**YGWA-5D**	SM 2450C-2011	604300		
92525335003	**DUP-1**	SM 2450C-2011	604300		
92525335005	**YGWA-14S**	SM 2450C-2011	604300		
92525335006	**YGWA-30I**	SM 2450C-2011	604206		
92525335007	**FB-01**	SM 2450C-2011	604527		
92525335008	**DUP-01**	SM 2450C-2011	604527		
92525335009	**FB-01**	SM 2450C-2011	604527		
92525335011	**YGWA-40**	SM 2450C-2011	604765		
92525335012	**YGWA-17S**	SM 2450C-2011	604626		
92525335013	**YGWA-18S**	SM 2450C-2011	604626		
92525335014	**YGWA-18I**	SM 2450C-2011	604764		
92525335015	**YGWA-39**	SM 2450C-2011	604765		
92525335016	**YGWA-1D (030321)**	SM 2450C-2011	604764		
92525335017	**YGWA-1I (030321)**	SM 2450C-2011	604764		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92525335

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525335018	**YGWA-2I (030321)**	SM 2450C-2011	604764		
92525335019	**YGWA-3I (030321)**	SM 2450C-2011	604764		
92525335020	**YGWA-3D (030321)**	SM 2450C-2011	604764		
92525335021	**EB-02 (03032021)**	SM 2450C-2011	604764		
92525335022	**YGWA-4I**	SM 2450C-2011	604764		
92525335023	**YGWA-20S**	SM 2450C-2011	604764		
92525335024	**YGWA-21I**	SM 2450C-2011	604765		
92525335001	**YGWA-5I**	EPA 300.0 Rev 2.1 1993	604544		
92525335002	**YGWA-5D**	EPA 300.0 Rev 2.1 1993	604544		
92525335003	**DUP-1**	EPA 300.0 Rev 2.1 1993	604544		
92525335005	**YGWA-14S**	EPA 300.0 Rev 2.1 1993	604544		
92525335006	**YGWA-30I**	EPA 300.0 Rev 2.1 1993	604544		
92525335007	**FB-01**	EPA 300.0 Rev 2.1 1993	604544		
92525335008	**DUP-01**	EPA 300.0 Rev 2.1 1993	604544		
92525335009	**FB-01**	EPA 300.0 Rev 2.1 1993	604544		
92525335011	**YGWA-40**	EPA 300.0 Rev 2.1 1993	606455		
92525335012	**YGWA-17S**	EPA 300.0 Rev 2.1 1993	606455		
92525335013	**YGWA-18S**	EPA 300.0 Rev 2.1 1993	606455		
92525335014	**YGWA-18I**	EPA 300.0 Rev 2.1 1993	606455		
92525335015	**YGWA-39**	EPA 300.0 Rev 2.1 1993	606455		
92525335016	**YGWA-1D (030321)**	EPA 300.0 Rev 2.1 1993	606455		
92525335017	**YGWA-1I (030321)**	EPA 300.0 Rev 2.1 1993	606455		
92525335018	**YGWA-2I (030321)**	EPA 300.0 Rev 2.1 1993	606455		
92525335019	**YGWA-3I (030321)**	EPA 300.0 Rev 2.1 1993	606456		
92525335020	**YGWA-3D (030321)**	EPA 300.0 Rev 2.1 1993	606456		
92525335021	**EB-02 (03032021)**	EPA 300.0 Rev 2.1 1993	606456		
92525335022	**YGWA-4I**	EPA 300.0 Rev 2.1 1993	606456		
92525335023	**YGWA-20S**	EPA 300.0 Rev 2.1 1993	606456		
92525335024	**YGWA-21I**	EPA 300.0 Rev 2.1 1993	606456		

REPORT OF LABORATORY ANALYSIS

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: **WO# : 92525335**

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: MT 5/11/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.0 Correction Factor: Add/Subtract (°C) ±0

Cooler Temp Corrected (°C): 4.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
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	☑	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # WO#: 92525335

PM: KLH1 Due Date: 03/16/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CH)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic H2SO4 (pH < 2) (CH)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CH)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CH)	AG1H-1 liter Amber HCl (pH < 2)	AG1U-250 mL Amber Unpreserved (N/A) (CH)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG1N-250 mL Amber H2SO4 (pH < 2)	AG1M[500AA]-250 mL Amber NH4Cl (N/A)(CH)	DG9H-40 mL VOA HCl (N/A)	VG9U-40 mL VOA Unp (N/A)	VG9H-40 mL VOA H2SO4 (N/A)	DG9H-40 mL VOA H2SO4 (N/A)	VG9A (6 vials per kit)-40mL H2SO4 kit (N/A)	VJ5N (3 vials per kit)-HNO3/H2SO4 kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - kit)	SP5T-250 mL Sterile Plastic (N/A - kit)	BP	BP4A-250 mL Plastic (NH4)2SO4 (0.1-0.5)	AG2U-100 mL Amber Unpreserved vials (N/A)	VSAU-20 mL Scintillation vials (N/A)	DG8U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																					
2		1	1			1																					
3		1	1			1																					
4		1	1			1																					
5		1	1			1																					
6		1	1			1																					
7		1	1			1																					
8		1	1			1																					
9		1	1			1																					
10		1	1			1																					
11																											
12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 4

COC 1 UK

Section A Required Client Information:
Company: Georgia Power
Address: 1409 Bridge Mill Ave
Canton, GA 30114
Email:
Phone: (770)384-6508 Fax
Requested Due Date:

Section B Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10940

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start DATE	Start TIME	End DATE	End TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	92525375
1		WT																x	x	x	x		
2		WT																x	x	x	x		
3		WT																x	x	x	x		
4	YGWA	WT																x	x	x	x		
5	YGWA YGWA-5E	WT		3/2	1405				3	5		1						x	x	x	x		pH: 5.63
6	YGWA YGWA-5D	WT		3/2	1440				3	5		1						x	x	x	x		pH: 7.15
7	YGWA DUP-1	WT		3/2	–				3	5		1						x	x	x	x		
8	YGWA	WT																x	x	x	x		
9	YGWA	WT																x	x	x	x		
10	YGWA	WT																x	x	x	x		
11	YGWA	WT																x	x	x	x		
12	YGWA	WT																x	x	x	x		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[illegible signature]	3/2/21	1600	[illegible signature]	3-2-21	1600				
		3-2-21	1730	[illegible signature]	3/2/21	1930	4.0	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Azzaro
SIGNATURE of SAMPLER: [illegible signature]
DATE Signed: 03/02/2021

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Oct 1 - 06

Section A
Required Client Information:
Company: Georgia Power
Address: 1000 Bridge Mill Ave
Suwanee, GA 30174
Phone: (770) 904-6529 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Bobby Skinner
Copy To:
Purchase Order #:
Project Name: Yates Plant Ash Pond Closure
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com
Pace Profile #: 53043

Regulatory Agency

State / Location: GA

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	Residual Chlorine (Y/N)	Remarks
YGWA-67	WT		3/1	1330			5/	1									TDS x, Cl, F, SO4 x, App Silica Vapors x, RAD Emissions x		pH
YGWA-68	WT																		pH 5.48
YGWA-69	WT																		
YGWA-70	WT																		
YGWA-71	WT																		
YGWA-GEA	WT																		

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	3/2/21	1530		3.2.21	1530	
	3.2.21	1730	Pace/FedEx	3/4/21	1730	4.1 Y N Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Peter Pregakis

SIGNATURE of SAMPLER: [signature]

DATE Signed: 03/02/2021

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 4

CoC 1 · UG

Section A Required Client Information:
Company: Georgia Power
Address: [illegible]
[illegible], GA [illegible]
Phone: [illegible] Fax:
Requested Due Date:

Section B Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: [illegible] UG [illegible]
Project #:

Section C Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	[illegible]	WT																X	X	X	X	
2	[illegible]	WT																X	X	X	X	
3	[illegible]	WT																X	X	X	X	
4	[illegible]	WT																X	X	X	X	
5	[illegible]	WT																X	X	X	X	
6	YGWA-14S	WT		3/2	1124				5	✓		✓						X	X	X	X	pH 5.49
7	YGWA-30	WT		3/[illegible]	[illegible]				5	✓		✓						X	X	X	X	pH 5.78
8	FB-01	WT		3/2	1130				5	✓		✓						X	X	X	X	–
9	DUP-01	WT		3/2	—				5	✓		✓						X	X	X	X	–
10	[illegible]	WT																X	X	X	X	
11	[illegible]	WT																X	X	X	X	
12	[illegible]	WT																X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	3/2/2[illegible]	17:34	[illegible] / Pace	[illegible]	1730	4.0	Y	N	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: [illegible]
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/2/2021

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Page 1 of 4

Section A
Required Client Information:
Company: Georgia Power
Address: 1070 Bishop Mill Ave
GA 30114
Phone: (770) 284-5526 Fax
Email To:
Requested Due Date:

Section B
Required Project Information:
Report To: Becky Deaver
Copy To:
Purchase Order #:
Project Name: Yates Combustion By-Prod. Landfill
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10845

Regulatory Agency:
State / Location: GA

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample IDs must be unique

MATRIX CODE: Drinking Water (DW), Water (WT), Waste Water (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Other (OT), Tissue (TS)

SAMPLE TYPE (G=GRAB C=COMP)

COLLECTED: START DATE, START TIME, END DATE, END TIME

Matrix Code / Sample Type

Preservatives: # OF CONTAINERS, Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other

Analysis Test: TDS, Cl, F, SO4, App. Visibility Meters, RAD 226/228/320

Residual Chlorine (Y/N)

SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test	TDS	Cl, F, SO4	App. Visibility Meters	RAD 226/228/320	Residual Chlorine (Y/N)
	WT																X	X	X	X	
	WT																X	X	X	X	
FB-01	WT		3/2	1520			3	✓		✓							X	X	X	X	
	WT		3/2	1510			3	✓		✓							X	X	X	X	
	WT																X	X	X	X	
	WT																X	X	X	X	
	WT																X	X	X	X	
	WT																X	X	X	X	
	WT																X	X	X	X	
	WT																X	X	X	X	

PM 5/2

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		3/2/21	1520		3.2.21	1540	
		3.2.21	1730		3/4/21	1730	4.0 Y N Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jamie Summers
SIGNATURE of SAMPLER:
DATE Signed: 3/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 28, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES RADS
Pace Project No.: 92525896

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES RADS
Pace Project No.: 92525896

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES RADS
Pace Project No.: 92525896

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525896001	**YGWC-24SA**	Water	03/03/21 11:50	03/05/21 09:20
92525896002	**YGWC-36A**	Water	03/04/21 12:35	03/05/21 09:20
92525896003	**DUP-2**	Water	03/03/21 00:00	03/05/21 09:20
92525896004	**YGWC-23S**	Water	03/04/21 12:15	03/05/21 09:20
92525896005	**YGWC-41**	Water	03/04/21 09:00	03/05/21 09:20
92525896006	**YGWC-43**	Water	03/04/21 14:50	03/05/21 09:20
92525896007	**FB-1**	Water	03/04/21 14:00	03/05/21 09:20
92525896008	**EB-2**	Water	03/04/21 16:35	03/05/21 09:20
92525896009	**YGWC-49**	Water	03/04/21 14:51	03/05/21 09:20
92525896010	**FB-02**	Water	03/04/21 15:00	03/05/21 09:20
92525896011	**YGWC-42**	Water	03/04/21 08:45	03/05/21 09:20
92525896012	**YGWC-38**	Water	03/04/21 13:45	03/05/21 09:20

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92525896

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525896001	**YGWC-24SA**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896002	**YGWC-36A**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896003	**DUP-2**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896004	**YGWC-23S**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896005	**YGWC-41**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896006	**YGWC-43**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896007	**FB-1**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896008	**EB-2**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896009	**YGWC-49**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896010	**FB-02**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896011	**YGWC-42**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525896012	**YGWC-38**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92525896

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525896

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525896001	**YGWC-24SA**					
EPA 9315	Radium-226	0.139 ± 0.138 (0.275) C:85% T:NA	pCi/L		03/25/21 09:48	
EPA 9320	Radium-228	0.276 ± 0.454 (0.991) C:80% T:85%	pCi/L		03/25/21 15:46	
Total Radium Calculation	Total Radium	0.415 ± 0.592 (1.27)	pCi/L		03/26/21 13:56	
92525896002	**YGWC-36A**					
EPA 9315	Radium-226	0.0671 ± 0.0999 (0.218) C:93% T:NA	pCi/L		03/25/21 10:15	
EPA 9320	Radium-228	-0.226 ± 0.464 (1.10) C:78% T:88%	pCi/L		03/25/21 15:46	
Total Radium Calculation	Total Radium	0.0671 ± 0.564 (1.32)	pCi/L		03/26/21 13:56	
92525896003	**DUP-2**					
EPA 9315	Radium-226	4.78 ± 0.878 (0.257) C:85% T:NA	pCi/L		03/25/21 12:25	
EPA 9320	Radium-228	0.329 ± 0.440 (0.941) C:81% T:76%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	5.11 ± 1.32 (1.20)	pCi/L		03/26/21 13:56	
92525896004	**YGWC-23S**					
EPA 9315	Radium-226	0.230 ± 0.209 (0.423) C:82% T:NA	pCi/L		03/25/21 09:48	
EPA 9320	Radium-228	0.541 ± 0.461 (0.933) C:75% T:79%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	0.771 ± 0.670 (1.36)	pCi/L		03/26/21 13:56	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525896

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525896005	**YGWC-41**					
EPA 9315	Radium-226	0.260 ± 0.174 (0.297) C:84% T:NA	pCi/L		03/25/21 09:48	
EPA 9320	Radium-228	0.968 ± 0.491 (0.867) C:77% T:80%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	1.23 ± 0.665 (1.16)	pCi/L		03/26/21 13:56	
92525896006	**YGWC-43**					
EPA 9315	Radium-226	4.73 ± 0.872 (0.278) C:87% T:NA	pCi/L		03/25/21 09:54	
EPA 9320	Radium-228	1.29 ± 0.544 (0.903) C:76% T:85%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	6.02 ± 1.42 (1.18)	pCi/L		03/26/21 13:56	
92525896007	**FB-1**					
EPA 9315	Radium-226	0.135 ± 0.137 (0.269) C:85% T:NA	pCi/L		03/25/21 09:48	
EPA 9320	Radium-228	0.616 ± 0.480 (0.955) C:76% T:77%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	0.751 ± 0.617 (1.22)	pCi/L		03/26/21 13:56	
92525896008	**EB-2**					
EPA 9315	Radium-226	0.0835 ± 0.120 (0.261) C:88% T:NA	pCi/L		03/25/21 12:27	
EPA 9320	Radium-228	0.815 ± 0.506 (0.961) C:82% T:73%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	0.899 ± 0.626 (1.22)	pCi/L		03/26/21 13:56	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525896

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525896009	**YGWC-49**					
EPA 9315	Radium-226	0.207 ± 0.133 (0.183) C:79% T:NA	pCi/L		03/25/21 08:50	
EPA 9320	Radium-228	0.372 ± 0.474 (1.01) C:77% T:75%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	0.579 ± 0.607 (1.19)	pCi/L		03/26/21 13:56	
92525896010	**FB-02**					
EPA 9315	Radium-226	0.0807 ± 0.102 (0.208) C:80% T:NA	pCi/L		03/25/21 08:50	
EPA 9320	Radium-228	0.189 ± 0.409 (0.904) C:82% T:77%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	0.270 ± 0.511 (1.11)	pCi/L		03/26/21 13:56	
92525896011	**YGWC-42**					
EPA 9315	Radium-226	0.192 ± 0.134 (0.220) C:89% T:NA	pCi/L		03/25/21 08:50	
EPA 9320	Radium-228	0.830 ± 0.440 (0.791) C:79% T:86%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	1.02 ± 0.574 (1.01)	pCi/L		03/26/21 13:56	
92525896012	**YGWC-38**					
EPA 9315	Radium-226	0.131 ± 0.115 (0.207) C:89% T:NA	pCi/L		03/25/21 08:50	
EPA 9320	Radium-228	0.685 ± 0.396 (0.723) C:78% T:87%	pCi/L		03/25/21 15:48	
Total Radium Calculation	Total Radium	0.816 ± 0.511 (0.930)	pCi/L		03/26/21 13:56	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-24SA **Lab ID: 92525896001** Collected: 03/03/21 11:50 Received: 03/05/21 09:20 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	**0.139 ± 0.138 (0.275) C:85% T:NA**	pCi/L	03/25/21 09:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.276 ± 0.454 (0.991) C:80% T:85%**	pCi/L	03/25/21 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.415 ± 0.592 (1.27)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-36A **Lab ID: 92525896002** Collected: 03/04/21 12:35 Received: 03/05/21 09:20 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	**0.0671 ± 0.0999 (0.218) C:93% T:NA**	pCi/L	03/25/21 10:15	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.226 ± 0.464 (1.10) C:78% T:88%**	pCi/L	03/25/21 15:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0671 ± 0.564 (1.32)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: DUP-2 **Lab ID: 92525896003** Collected: 03/03/21 00:00 Received: 03/05/21 09:20 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	**4.78 ± 0.878 (0.257) C:85% T:NA**	pCi/L	03/25/21 12:25	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.329 ± 0.440 (0.941) C:81% T:76%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**5.11 ± 1.32 (1.20)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-23S **Lab ID: 92525896004** Collected: 03/04/21 12:15 Received: 03/05/21 09:20 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	**0.230 ± 0.209 (0.423) C:82% T:NA**	pCi/L	03/25/21 09:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.541 ± 0.461 (0.933) C:75% T:79%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.771 ± 0.670 (1.36)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-41 **Lab ID: 92525896005** Collected: 03/04/21 09:00 Received: 03/05/21 09:20 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	**0.260 ± 0.174 (0.297) C:84% T:NA**	pCi/L	03/25/21 09:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.968 ± 0.491 (0.867) C:77% T:80%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23 ± 0.665 (1.16)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-43 **Lab ID: 92525896006** Collected: 03/04/21 14:50 Received: 03/05/21 09:20 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	**4.73 ± 0.872 (0.278) C:87% T:NA**	pCi/L	03/25/21 09:54	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.29 ± 0.544 (0.903) C:76% T:85%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**6.02 ± 1.42 (1.18)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: FB-1 **Lab ID: 92525896007** Collected: 03/04/21 14:00 Received: 03/05/21 09:20 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	**0.135 ± 0.137 (0.269) C:85% T:NA**	pCi/L	03/25/21 09:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.616 ± 0.480 (0.955) C:76% T:77%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.751 ± 0.617 (1.22)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: EB-2 **Lab ID: 92525896008** Collected: 03/04/21 16:35 Received: 03/05/21 09:20 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	**0.0835 ± 0.120 (0.261) C:88% T:NA**	pCi/L	03/25/21 12:27	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.815 ± 0.506 (0.961) C:82% T:73%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.899 ± 0.626 (1.22)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-49 **Lab ID: 92525896009** Collected: 03/04/21 14:51 Received: 03/05/21 09:20 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	**0.207 ± 0.133 (0.183) C:79% T:NA**	pCi/L	03/25/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.372 ± 0.474 (1.01) C:77% T:75%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.579 ± 0.607 (1.19)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: FB-02 **Lab ID: 92525896010** Collected: 03/04/21 15:00 Received: 03/05/21 09:20 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	**0.0807 ± 0.102 (0.208) C:80% T:NA**	pCi/L	03/25/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.189 ± 0.409 (0.904) C:82% T:77%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.270 ± 0.511 (1.11)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-42 **Lab ID: 92525896011** Collected: 03/04/21 08:45 Received: 03/05/21 09:20 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	**0.192 ± 0.134 (0.220) C:89% T:NA**	pCi/L	03/25/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.830 ± 0.440 (0.791) C:79% T:86%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02 ± 0.574 (1.01)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

Sample: YGWC-38 **Lab ID: 92525896012** Collected: 03/04/21 13:45 Received: 03/05/21 09:20 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	**0.131 ± 0.115 (0.207) C:89% T:NA**	pCi/L	03/25/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.685 ± 0.396 (0.723) C:78% T:87%**	pCi/L	03/25/21 15:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.816 ± 0.511 (0.930)**	pCi/L	03/26/21 13:56	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

QC Batch: 438168 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525896001, 92525896002, 92525896003, 92525896004, 92525896005, 92525896006, 92525896007, 92525896008, 92525896009, 92525896010, 92525896011, 92525896012

METHOD BLANK: 2115336 Matrix: Water
Associated Lab Samples: 92525896001, 92525896002, 92525896003, 92525896004, 92525896005, 92525896006, 92525896007, 92525896008, 92525896009, 92525896010, 92525896011, 92525896012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0301 ± 0.353 (0.815) C:79% T:75%	pCi/L	03/25/21 12:20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525896

QC Batch: 438264 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525896001, 92525896002, 92525896003, 92525896004, 92525896005, 92525896006, 92525896007, 92525896008, 92525896009, 92525896010, 92525896011, 92525896012

METHOD BLANK: 2115666 Matrix: Water
Associated Lab Samples: 92525896001, 92525896002, 92525896003, 92525896004, 92525896005, 92525896006, 92525896007, 92525896008, 92525896009, 92525896010, 92525896011, 92525896012

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0177 ± 0.140 (0.349) C:93% T:NA	pCi/L	03/25/21 09:33	

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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QUALIFIERS

Project: YATES RADS
Pace Project No.: 92525896

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.

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: YATES RADS
Pace Project No.: 92525896

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525896001	**YGWC-24SA**	EPA 9315	438264		
92525896002	**YGWC-36A**	EPA 9315	438264		
92525896003	**DUP-2**	EPA 9315	438264		
92525896004	**YGWC-23S**	EPA 9315	438264		
92525896005	**YGWC-41**	EPA 9315	438264		
92525896006	**YGWC-43**	EPA 9315	438264		
92525896007	**FB-1**	EPA 9315	438264		
92525896008	**EB-2**	EPA 9315	438264		
92525896009	**YGWC-49**	EPA 9315	438264		
92525896010	**FB-02**	EPA 9315	438264		
92525896011	**YGWC-42**	EPA 9315	438264		
92525896012	**YGWC-38**	EPA 9315	438264		
92525896001	**YGWC-24SA**	EPA 9320	438168		
92525896002	**YGWC-36A**	EPA 9320	438168		
92525896003	**DUP-2**	EPA 9320	438168		
92525896004	**YGWC-23S**	EPA 9320	438168		
92525896005	**YGWC-41**	EPA 9320	438168		
92525896006	**YGWC-43**	EPA 9320	438168		
92525896007	**FB-1**	EPA 9320	438168		
92525896008	**EB-2**	EPA 9320	438168		
92525896009	**YGWC-49**	EPA 9320	438168		
92525896010	**FB-02**	EPA 9320	438168		
92525896011	**YGWC-42**	EPA 9320	438168		
92525896012	**YGWC-38**	EPA 9320	438168		
92525896001	**YGWC-24SA**	Total Radium Calculation	440647		
92525896002	**YGWC-36A**	Total Radium Calculation	440647		
92525896003	**DUP-2**	Total Radium Calculation	440647		
92525896004	**YGWC-23S**	Total Radium Calculation	440647		
92525896005	**YGWC-41**	Total Radium Calculation	440647		
92525896006	**YGWC-43**	Total Radium Calculation	440647		
92525896007	**FB-1**	Total Radium Calculation	440647		
92525896008	**EB-2**	Total Radium Calculation	440647		
92525896009	**YGWC-49**	Total Radium Calculation	440647		
92525896010	**FB-02**	Total Radium Calculation	440647		
92525896011	**YGWC-42**	Total Radium Calculation	440647		
92525896012	**YGWC-38**	Total Radium Calculation	440647		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-010-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: G A Power

Project #: WO#: 92525896

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 3/5/21 MP

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.1 Correction Factor: Add/Subtract (°C): -0.1 Type of Ice:

Cooler Temp Corrected (°C): 2.0

Temp should be above freezing to 6°C ☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

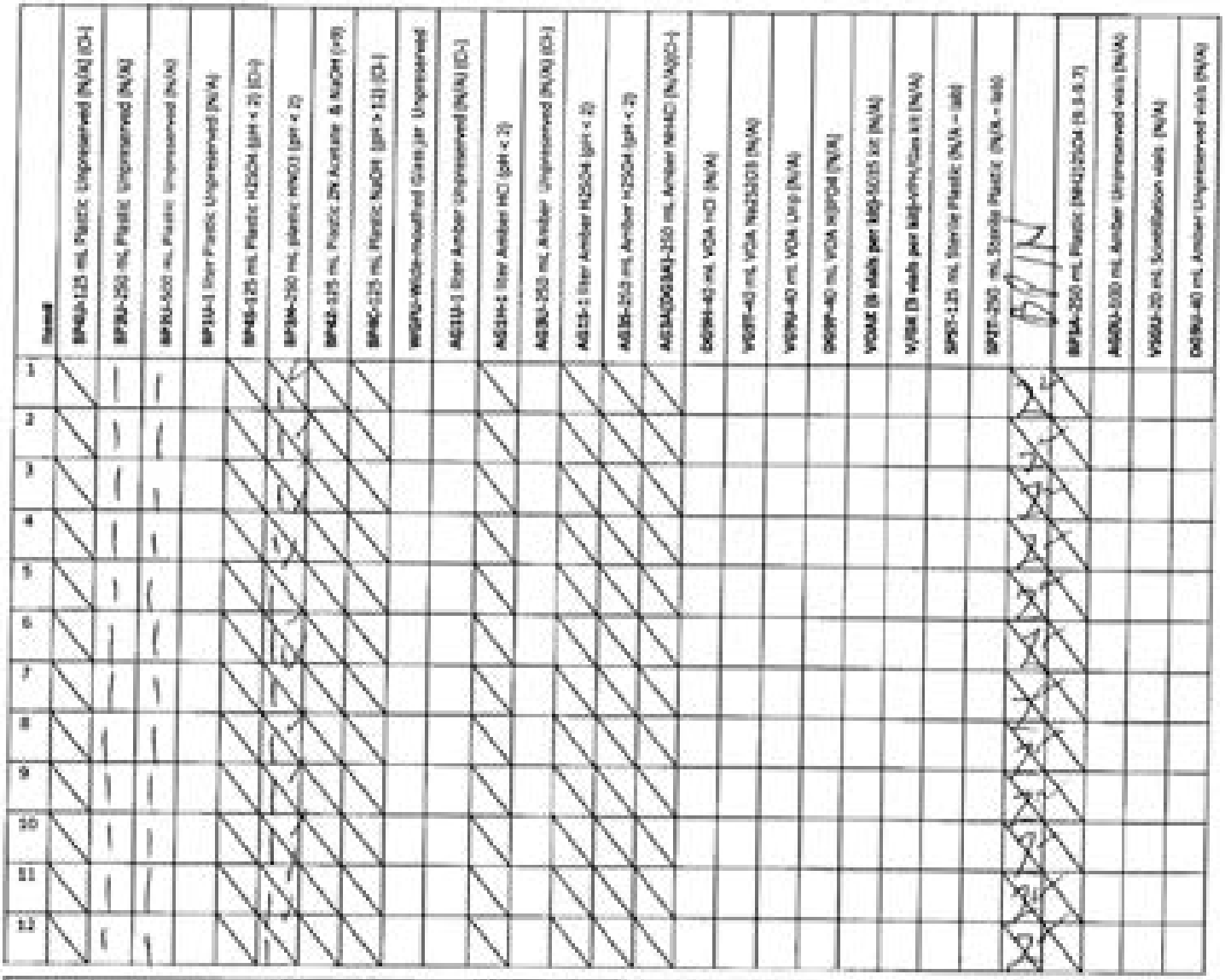
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO# : 92525896**

PM: KLH1 Due Date: 03/26/21

CLIENT: GA-GA Power



pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 5

CDC 2

Section A – Required Client Information: Georgia Power; 1000 Bridge Mill Ave; Phone: (770) [illegible]; Fax; Requested Due Date

Section B – Required Project Information: Report To: Scott [illegible]; Copy To; Purchase Order #; Project Name: Yates AMA; Project #

Section C – Invoice Information: Attention; Company Name; Address; Pace Quote; Pace Project Manager: [illegible]; Pace Profile #

Regulatory Agency

State / Location: GA

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	# OF CONTAINERS	Unpreserved	HNO3	TDS	Cl, F, SO4	App III/IV Metals	RAD 226/228	Residual Chlorine (Y/N)
13	YGWC-24SA	WT		[illegible]	1150			5	X	X	X	X	X	X	pH - 5.70
14	YGWC-36A	WT		[illegible]	1255			5			X	X	X	X	pH - 5.67
15	DUP-2	WT		[illegible]	-			5			X	X	X	X	—
16		WT													
17		WT													—
18		WT													—
19		WT													—
20		WT													—
21															
22															
23															
24															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	[illegible]	1606	Charles [illegible]	7/5/[illegible]	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter [illegible]
SIGNATURE of SAMPLER: [signature]
DATE Signed: 02/[illegible]/2024

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.

Pace Analytical

Page: 2 of 5

COC 3

Section A — Required Client Information:

Company: Georgia Power
Address: 1070 Bridge Mill Ave
[illegible], GA 30114
Email:
Phone: (770)[illegible] Fax:
Requested Due Date:

Section B — Required Project Information:

Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C — Invoice Information:

Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com,
Pace Profile #: 10040

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
13	YGWL-23S	WT		3/4	1215				5	/		/						X	X	X	X	Ph: 5.44
14	~~[illegible]~~	WT																~~X~~	~~X~~	~~X~~	~~X~~	—
15	~~[illegible]~~	WT																~~X~~	~~X~~	~~X~~	~~X~~	—
16		WT																X	X	X	X	
17		WT																X	X	X	X	
18		WT																X	X	X	X	
19		WT																X	X	X	X	
20		WT																X	X	X	X	
21																						
22																						
23																						
24																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	Charlie Hawley	3/5/21	0930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/4/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 5
COC 2

Section A – Required Client Information:
Company: Georgia Power
Address: 2480 Maner Road
Atlanta, GA 30339
Phone: (770) 384-6329

Section B – Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Ba
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: kevin.herring@pacelabs.com
Pace Profile #: 10643

Regulatory Agency
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App. III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	[illegible]	WT																X	X	X	X	
2	[illegible]	WT																X	X	X	X	
3	YGWC-41	WT		3/4	0900				5	✓		✓						X	X	X	X	
4	[illegible]	WT																X	X	X	X	pH: 4.69
5	YGWC-43	WT		3/4	1450				5	✓		✓						X	X	X	X	
6	[illegible]	WT																X	X	X	X	pH: 5.88
7	FB-1	WT		3/4	1500				5	✓		✓						X	X	X	X	
8	GB-2	WT		3/4	1635				5	✓		✓						X	X	X	X	
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Jake Swanson	3/4/21	1700	[signature]	3/5/21	1900	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jake Swanson
SIGNATURE of SAMPLER: [signature]
DATE Signed: 3/4/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 4 of 5

COC 8

Section A – Required Client Information	Section B – Required Project Information	Section C – Invoice Information
Company: Georgia Power	Report To: Becky Steever	Attention:
Address: [illegible] Bridge Mill Ave	Copy To:	Company Name:
[illegible], GA 30114		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: (770) [illegible] Fax:	Project Name: Yates AMA	Pace Project Manager: [illegible]@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: [illegible]

Regulatory Agency:

State / Location: GA

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	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
13	[illegible] (struck through)	WT																[illegible] (struck through)				—
14	[illegible] (struck through)	WT																[illegible] (struck through)				—
15	YGWC-49	WT		3/4/21	1451				5	/		/						X	X	X	X	pH: 5.88
16	FB-02	WT		3/4/21	1500				5	/		/						X	X	X	X	—
17		WT																X	X	X	X	
18		WT																X	X	X	X	
19		WT																X	X	X	X	
20		WT																X	X	X	X	
21																						
22																						
23																						
24																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	3/4/21	1645	[signature]	3/5/21	0920	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Bykiewicz

SIGNATURE of SAMPLER: [signature]

DATE Signed: 3-4-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 5 of 5

Section A
Required Client Information:
Company: Georgia Power
Address: 1973 Bridge Mill Ave
Mon, GA 30114
Email:
Phone: (770) 684-4324 Fax:
Requested Due Date:

Section B
Required Project Information:
Report To: Brooke Downer
Copy To:
Purchase Order #:
Project Name: Yates 7th
Project #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10840

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test: TDS	Cl, F, SO4	App Gr Alpha	Rad 226/228	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
1		WT																					
2		WT																					
3		WT																					
4	YDWC-02	WT		3-4-21	8:45				5	✓					✓								pH: 5.59
5		WT																					
6	YDWC-09	WT		3-4-21	13:45				5	✓					✓								pH: 5.01
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		3-4-21	16:45		3/4/21	1652	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Petruska
SIGNATURE of SAMPLER: DATE Signed: 3-4-21

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

March 28, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES RADS
Pace Project No.: 92525905

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES RADS
Pace Project No.: 92525905

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES RADS
Pace Project No.: 92525905

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92525905001	**YAMW-2**	Water	03/03/21 14:10	03/05/21 09:20
92525905002	**YAMW-4**	Water	03/03/21 13:05	03/05/21 09:20
92525905003	**YAMW-5**	Water	03/04/21 14:15	03/05/21 09:20
92525905004	**YAMW-1**	Water	03/03/21 15:15	03/05/21 09:20
92525905005	**PZ-35**	Water	03/04/21 15:30	03/05/21 09:20
92525905006	**EB1**	Water	03/04/21 16:00	03/05/21 09:20
92525905007	**PZ-37**	Water	03/04/21 11:55	03/05/21 09:20

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92525905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92525905001	**YAMW-2**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525905002	**YAMW-4**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525905003	**YAMW-5**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525905004	**YAMW-1**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525905005	**PZ-35**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525905006	**EB1**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA
92525905007	**PZ-37**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	CMC	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525905

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525905001	**YAMW-2**					
EPA 9315	Radium-226	0.101 ± 0.102 (0.188) C:85% T:NA	pCi/L		03/25/21 08:50	
EPA 9320	Radium-228	0.462 ± 0.393 (0.795) C:80% T:79%	pCi/L		03/25/21 12:21	
Total Radium Calculation	Total Radium	0.563 ± 0.495 (0.983)	pCi/L		03/26/21 14:34	
92525905002	**YAMW-4**					
EPA 9315	Radium-226	0.252 ± 0.159 (0.242) C:72% T:NA	pCi/L		03/25/21 08:50	
EPA 9320	Radium-228	0.822 ± 0.449 (0.823) C:80% T:80%	pCi/L		03/25/21 12:21	
Total Radium Calculation	Total Radium	1.07 ± 0.608 (1.07)	pCi/L		03/26/21 14:34	
92525905003	**YAMW-5**					
EPA 9315	Radium-226	0.479 ± 0.208 (0.275) C:84% T:NA	pCi/L		03/25/21 08:50	
EPA 9320	Radium-228	0.979 ± 0.406 (0.656) C:81% T:89%	pCi/L		03/25/21 12:21	
Total Radium Calculation	Total Radium	1.46 ± 0.614 (0.931)	pCi/L		03/26/21 14:34	
92525905004	**YAMW-1**					
EPA 9315	Radium-226	0.131 ± 0.146 (0.301) C:79% T:NA	pCi/L		03/26/21 08:05	
EPA 9320	Radium-228	0.246 ± 0.446 (0.975) C:81% T:71%	pCi/L		03/23/21 13:46	
Total Radium Calculation	Total Radium	0.377 ± 0.592 (1.28)	pCi/L		03/26/21 14:34	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92525905

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92525905005	**PZ-35**					
EPA 9315	Radium-226	0.131 ± 0.116 (0.213) C:96% T:NA	pCi/L		03/26/21 08:05	
EPA 9320	Radium-228	0.266 ± 0.375 (0.806) C:85% T:83%	pCi/L		03/23/21 13:46	
Total Radium Calculation	Total Radium	0.397 ± 0.491 (1.02)	pCi/L		03/26/21 14:34	
92525905006	**EB1**					
EPA 9315	Radium-226	0.0452 ± 0.0923 (0.215) C:83% T:NA	pCi/L		03/26/21 08:05	
EPA 9320	Radium-228	0.393 ± 0.346 (0.695) C:82% T:77%	pCi/L		03/23/21 13:46	
Total Radium Calculation	Total Radium	0.438 ± 0.438 (0.910)	pCi/L		03/26/21 14:34	
92525905007	**PZ-37**					
EPA 9315	Radium-226	0.868 ± 0.271 (0.307) C:79% T:NA	pCi/L		03/26/21 08:10	
EPA 9320	Radium-228	0.626 ± 0.363 (0.662) C:78% T:92%	pCi/L		03/23/21 13:47	
Total Radium Calculation	Total Radium	1.49 ± 0.634 (0.969)	pCi/L		03/26/21 14:34	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

Sample: YAMW-2 **Lab ID: 92525905001** Collected: 03/03/21 14:10 Received: 03/05/21 09:20 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.101 ± 0.102 (0.188) C:85% T:NA**	pCi/L	03/25/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.462 ± 0.393 (0.795) C:80% T:79%**	pCi/L	03/25/21 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.563 ± 0.495 (0.983)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

Sample: YAMW-4 **Lab ID: 92525905002** Collected: 03/03/21 13:05 Received: 03/05/21 09:20 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	**0.252 ± 0.159 (0.242) C:72% T:NA**	pCi/L	03/25/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.822 ± 0.449 (0.823) C:80% T:80%**	pCi/L	03/25/21 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.07 ± 0.608 (1.07)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

Sample: YAMW-5 **Lab ID: 92525905003** Collected: 03/04/21 14:15 Received: 03/05/21 09:20 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	**0.479 ± 0.208 (0.275) C:84% T:NA**	pCi/L	03/25/21 08:50	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.979 ± 0.406 (0.656) C:81% T:89%**	pCi/L	03/25/21 12:21	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.46 ± 0.614 (0.931)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

Sample: YAMW-1 **Lab ID: 92525905004** Collected: 03/03/21 15:15 Received: 03/05/21 09:20 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	**0.131 ± 0.146 (0.301) C:79% T:NA**	pCi/L	03/26/21 08:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.246 ± 0.446 (0.975) C:81% T:71%**	pCi/L	03/23/21 13:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.377 ± 0.592 (1.28)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

Sample: PZ-35 **Lab ID: 92525905005** Collected: 03/04/21 15:30 Received: 03/05/21 09:20 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	**0.131 ± 0.116 (0.213) C:96% T:NA**	pCi/L	03/26/21 08:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.266 ± 0.375 (0.806) C:85% T:83%**	pCi/L	03/23/21 13:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.397 ± 0.491 (1.02)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

Sample: EB1 **Lab ID: 92525905006** Collected: 03/04/21 16:00 Received: 03/05/21 09:20 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	**0.0452 ± 0.0923 (0.215) C:83% T:NA**	pCi/L	03/26/21 08:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.393 ± 0.346 (0.695) C:82% T:77%**	pCi/L	03/23/21 13:46	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.438 ± 0.438 (0.910)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

Sample: PZ-37 **Lab ID: 92525905007** Collected: 03/04/21 11:55 Received: 03/05/21 09:20 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	**0.868 ± 0.271 (0.307) C:79% T:NA**	pCi/L	03/26/21 08:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.626 ± 0.363 (0.662) C:78% T:92%**	pCi/L	03/23/21 13:47	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.49 ± 0.634 (0.969)**	pCi/L	03/26/21 14:34	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

QC Batch: 438168
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525905001, 92525905002, 92525905003

METHOD BLANK: 2115336 Matrix: Water
Associated Lab Samples: 92525905001, 92525905002, 92525905003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0301 ± 0.353 (0.815) C:79% T:75%	pCi/L	03/25/21 12:20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

QC Batch: 438264
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525905001, 92525905002, 92525905003

METHOD BLANK: 2115666 Matrix: Water
Associated Lab Samples: 92525905001, 92525905002, 92525905003

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0177 ± 0.140 (0.349) C:93% T:NA	pCi/L	03/25/21 09:33	

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
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

QC Batch: 438266
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525905004, 92525905005, 92525905006, 92525905007

METHOD BLANK: 2115671 Matrix: Water
Associated Lab Samples: 92525905004, 92525905005, 92525905006, 92525905007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.142 ± 0.131 (0.243) C:77% T:NA	pCi/L	03/26/21 08:05	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92525905

QC Batch: 438169
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92525905004, 92525905005, 92525905006, 92525905007

METHOD BLANK: 2115337 Matrix: Water
Associated Lab Samples: 92525905004, 92525905005, 92525905006, 92525905007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.429 ± 0.325 (0.634) C:80% T:90%	pCi/L	03/23/21 13:45	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES RADS
Pace Project No.: 92525905

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.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES RADS
Pace Project No.: 92525905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92525905001	**YAMW-2**	EPA 9315	438264		
92525905002	**YAMW-4**	EPA 9315	438264		
92525905003	**YAMW-5**	EPA 9315	438264		
92525905004	**YAMW-1**	EPA 9315	438266		
92525905005	**PZ-35**	EPA 9315	438266		
92525905006	**EB1**	EPA 9315	438266		
92525905007	**PZ-37**	EPA 9315	438266		
92525905001	**YAMW-2**	EPA 9320	438168		
92525905002	**YAMW-4**	EPA 9320	438168		
92525905003	**YAMW-5**	EPA 9320	438168		
92525905004	**YAMW-1**	EPA 9320	438169		
92525905005	**PZ-35**	EPA 9320	438169		
92525905006	**EB1**	EPA 9320	438169		
92525905007	**PZ-37**	EPA 9320	438169		
92525905001	**YAMW-2**	Total Radium Calculation	440666		
92525905002	**YAMW-4**	Total Radium Calculation	440666		
92525905003	**YAMW-5**	Total Radium Calculation	440666		
92525905004	**YAMW-1**	Total Radium Calculation	440666		
92525905005	**PZ-35**	Total Radium Calculation	440666		
92525905006	**EB1**	Total Radium Calculation	440666		
92525905007	**PZ-37**	Total Radium Calculation	440666		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92525905

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 3/5/21 PAF

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C): 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected [°C]: 2.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ 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 (>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, Lllig

**Bottom half of box is to list number of bottles

Project # WO#:92525905

PM: KLH1 Due Date: 03/26/21

CLIENT: GR-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CH)	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) (CH)	BP3N-250 mL Plastic HNO3 (pH < 2)	BP2Z-125 mL Plastic ZN Acetate & NAOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CH)	WPDU-Wipe/Flush Plastic Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CH)	AG1H-1 liter Amber HCl (pH < 2)	AG4S-250 mL Amber Unpreserved (N/A) (CH)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG2S-500 mL Amber H2SO4 (pH < 2)	AG3S(DG9B)-250 mL Amber NaHSO (N/A)(CH)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VG9M (8 vials per kit)-5035 kit (N/A)	VJGU-terracore kit (N/A)	BP1T-125 mL Sterile Plastic (N/A - lab)	SP5T-250 mL Sterile Plastic (N/A - lab)		BP1A-250 mL Plastic ZnAc+NaOH (>9 & <12)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Septa vials (N/A)	DG8U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																						
2		1	1			1																						
3		1	1			1																						
4		1	1			1																						
5		1	1			1																						
6		1	1			1																						
7		1	1			1																						
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 2

COC 6

Section A – Required Client Information:
Company: Georgia Power
Address: [illegible]
Phone: [illegible]
Requested Due Date:

Section B – Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: [illegible]
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
1	YAMW-2	WT		[illegible]	1410				5	X		X						X	X	X	X		pH: 5.67
2	YAMW-4	WT		[illegible]	1305				5	X		X						X	X	X	X		pH: 6.80
3	YAMW-3	WT		[illegible]	1415				5	X		X						X	X	X	X		pH: 5.32
4	[struck through]	WT																X	X	X	X		
5	YAMW-1	WT		[illegible]	1515				5	X		X						X	X	X	X		pH: 6.54
6	FD-[illegible]	WT		[illegible]	1530				5	X		X						X	X	X	X		pH: 5.64
7	EB1			[illegible]	1600				5	X		X						X	X	X	X		—
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	03/04/[illegible]	1605	Charles Hart [illegible]	3/5/21	0920	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Peter Argyalis
SIGNATURE of SAMPLER: [signature]
DATE Signed: 03/04/[illegible]

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

COC 6

Section A – Required Client Information:
Company: Georgia Power
Address: 1070 Bridge Mill Ave
[illegible], GA 30114
Phone: (770)[illegible] Fax:
Requested Due Date:

Section B – Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates Ash
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]@pacelabs.com
Pace Profile #: [illegible]

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)	
13	PZ-37	WT		5-4-21	1155				5	/		/						X	X	X	X		pH-5.51
14		WT																X	X	X	X		
15		WT																X	X	X	X		
16		WT																X	X	X	X		
17		WT																X	X	X	X		
18		WT																X	X	X	X		
19		WT																X	X	X	X		
20		WT																X	X	X	X		
21																							
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	5-4-21	1045	[signature]	5/5/21	0930	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Lipkiewicz
SIGNATURE of SAMPLER: [signature] DATE Signed: 5-4-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

May 2021

PZ-37D

ARCADIS

Design & Consultancy for natural and built assets

Georgia Power Co. – Plant Yates

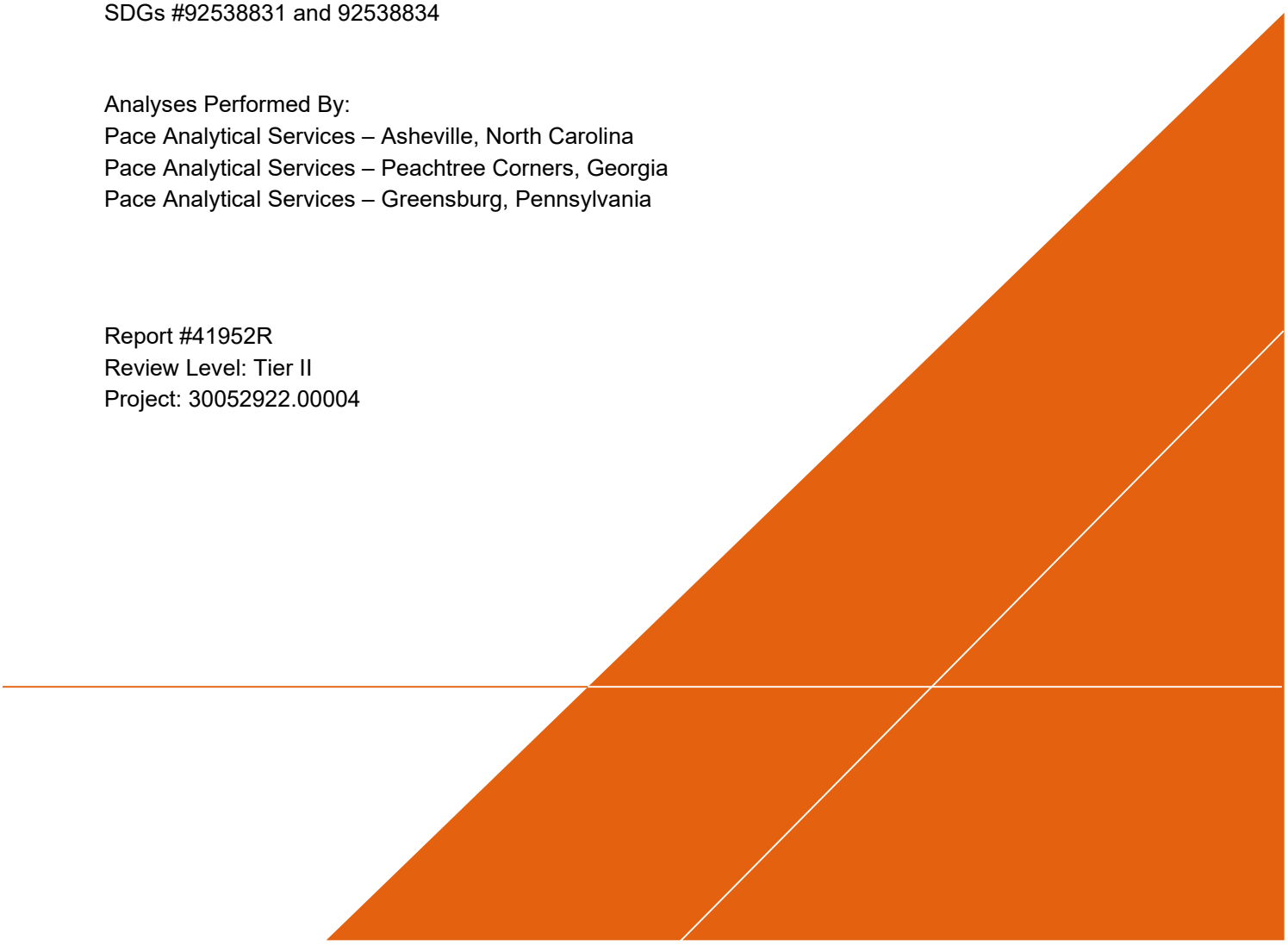
DATA REVIEW

Metals, Radium, and General Chemistry Analyses

SDGs #92538831 and 92538834

Analyses Performed By:
Pace Analytical Services – Asheville, North Carolina
Pace Analytical Services – Peachtree Corners, Georgia
Pace Analytical Services – Greensburg, Pennsylvania

Report #41952R
Review Level: Tier II
Project: 30052922.00004



SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #92538834 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
PZ-37D	92538831001 92538834001	Water	5/13/2021		X	X	X
FB-1	92538831002 92538834002	Water	5/13/2021		X	X	X
EB-1	92538831003 92538834003	Water	5/13/2021		X	X	X
DUP-1	92538831004 92538834004	Water	5/13/2021	PZ-37D	X	X	X

Notes:

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of 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 (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

Note:

QA - Quality Assurance

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January2017).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - * Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reported sample detection 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 analytes 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
PZ-37D DUP-1	Antimony (EB, FB, MB)	Detected sample results <RL and <BAL	"UB" at the RL

Note:

EB Equipment blank
FB Field blank
MB Method 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 PZ-37D in association with SW-846 6020B and SW-846 7470A analysis exhibited recoveries within the control limits.

MS/MSD analysis was not performed using a sample from this SDG in association with SW-846 6010D 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 using sample PZ-37D in association with SW-846 6020B and SW-846 7470A analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

Laboratory duplicate analysis was not performed using a sample from this SDG in association with SW-846 6010D 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
PZ-37D / DUP-1	Calcium	68.3	71.6	4.7%
	Boron	1.3	1.2	8.0%
	Barium	0.015	0.015	AC
	Lead	0.000049 J	0.000040 J	
	Lithium	0.011 J	0.011 J	
	Molybdenum	0.0042 J	0.0040 J	

Notes:

AC = Acceptable

The differences in the results between the parent sample PZ-37D and field duplicate sample DUP-1 were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES) Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Cold Vapor Atomic Absorption (CVAA)					
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	
Field/Lab Duplicate (RPD)		X		X	
Reporting Limit Verification		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD performed on sample location PZ-37D exhibited recoveries within control limits with the exception presented in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
PZ-37D	Sulfate	56%	42%

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

Laboratory duplicate analysis was not performed using a sample from this SDG in association with TDS analysis.

MS/MSD analysis was performed using samples PZ-37D in association with anion analysis in replacement of laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
PZ-37D / DUP-1	TDS	381	383	0.5%
	Sulfate	178	154	14.5%
	Chloride	4.0	3.9	AC
	Fluoride	0.12	0.12	

Notes:

AC = Acceptable

The differences in the results between the parent sample PZ-37D and field duplicate sample DUP-1 were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SM4500-H+ B, SM2540C, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment 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	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content	X				X

Notes:

%R Percent recovery

RPD Relative percent difference

RADIOLOGICAL ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:

s.u. = Standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits (+/- 2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of < +/- 3 sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x_0 = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between +/-3 sigma. Warning limits have been established as +/- 2 sigma.

MS analysis was not performed using a sample from this SDG.

3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In

the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

$$Z_{lab} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

x_1, x_2 = two measured activity concentrations.

$u^2(x_1)$, $u^2(x_2)$ = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between +/- 3 sigma. Warning limits have been established as +/- 2 sigma.

Laboratory duplicate analysis was not performed using a sample from this SDG.

4. Field Duplicate Analysis

The field duplicate sample analysis is used to assess the overall precision of the field sampling procedures and analytical method. For results greater than five times the MDC, a control limit of 35 percent for water matrices is applied to the RPD between the parent and field duplicate sample results. If the parent and field duplicate sample results are less than five times the MDC, for water matrices a control limit of two times the MDC is applied to the difference between the results.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
PZ-37D / DUP-1	Radium-226	2.70 ± 0.530	2.47 ± 0.489	8.9%
	Radium-228	2.66 ± 0.740	1.70 ± 0.569	AC
	Total Radium	5.36 ± 1.27	4.17 ± 1.06	

Notes:

AC = Acceptable

The differences in the results between the parent sample PZ-37D and field duplicate sample 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:

- FB-1 and 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	
Gas-Flow Proportional System					
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)		X		X	
Laboratory Control Sample Duplicate (LCSD)		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
Field/Lab Duplicate (RPD)		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

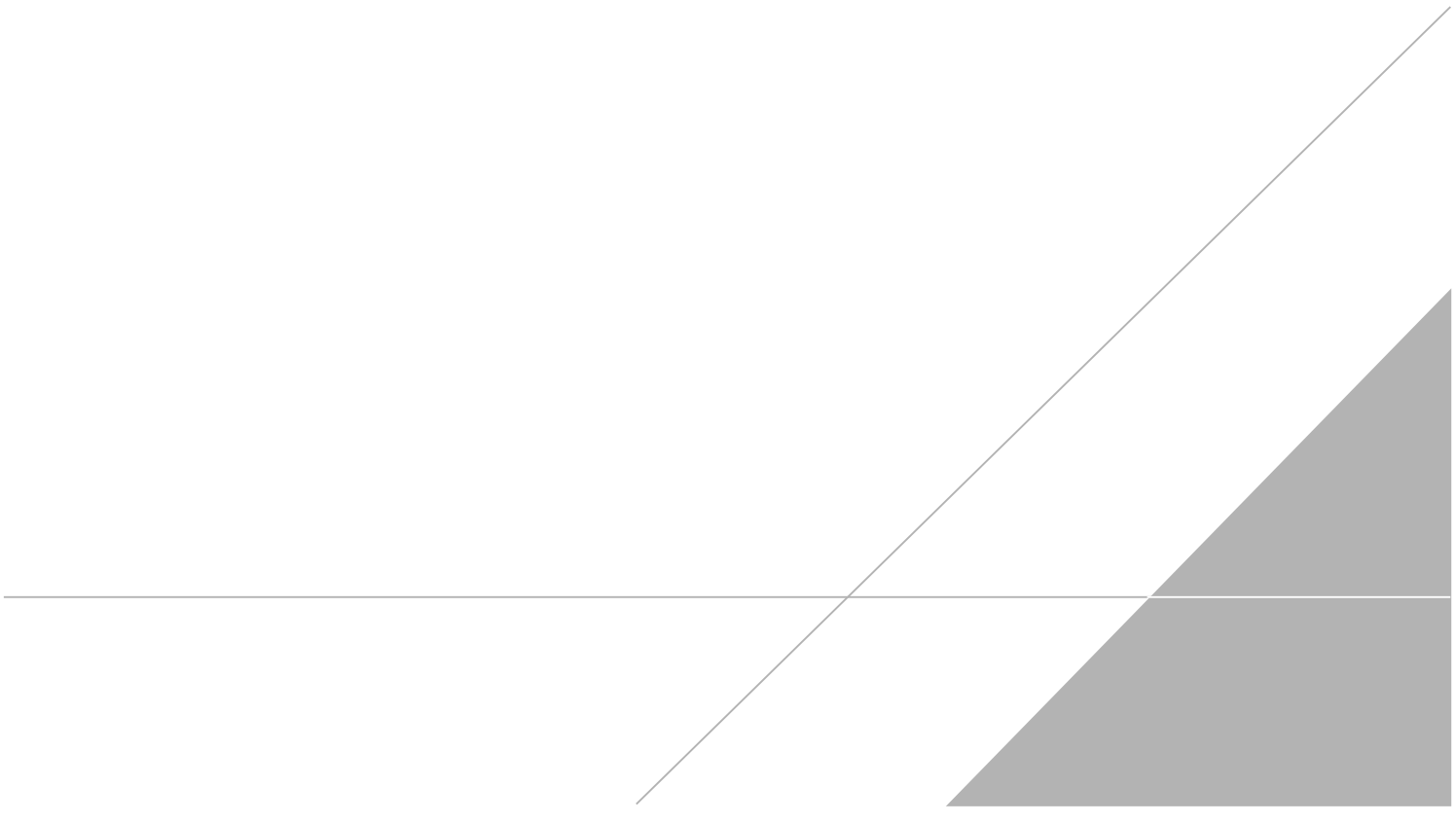
SIGNATURE: 

DATE: July 20, 2021

PEER REVIEW: Dennis Capria

DATE: August 6, 2021

CHAIN OF CUSTODY / DATA QUALIFIER SUMMARY TABLE



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power	Report To: Becky Steever	Attention:
Address: 1020 Bishop Mill Ave	Copy To:	Company Name:
Augusta, GA 30914		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: (706)294-4226 Fax:	Project Name: Vogtle	Pace Project Manager: kevin.herring@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: 10948

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

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	TDS	Cl, F, SO4	RAD (9315/9320)	Residual Chlorine (Y/N)
PZ-3TD (05136)			5/13	1135														X	X	X	X	
FB-01 (05132)			5/13	930														X	X	X	X	
EB-01 (05133)			5/13	1835														X	X	X	X	
DUP-01 (05134)			5/13	—														X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Becky Steever/Georgia Power	5/14/21	0930	Collected Here	5/14/21	0930	2.2 / 4 / N / Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Becky Steever

SIGNATURE of SAMPLER: 5/14/21

DATE Signed

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
2.2	Y	N	Y

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92538831	No qualifiers assigned						
92538834	PZ-37D	SW846 6020B	Antimony	0.0030	mg/L	UB	Blank contamination
		EPA 300.0	Sulfate	178	mg/L	J	MS %R <LCL, MSD %R <LCL
	DUP-1	SW846 6020B	Antimony	0.0030	mg/L	UB	Blank contamination

Abbreviations:
%R = percent recovery
LCL = lower control limit
mg/L = milligrams per liter
MS = matrix spike
MSD = matrix spike duplicate

Qualifiers:
J = estimated result
UB = not detected due to blank contamination

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

June 29, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES RADS
Pace Project No.: 92538831

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on May 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES RADS
Pace Project No.: 92538831

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES RADS
Pace Project No.: 92538831

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92538831001	**PZ-37D**	Water	05/13/21 12:30	05/14/21 09:30
92538831002	**FB-1**	Water	05/13/21 11:30	05/14/21 09:30
92538831003	**EB-1**	Water	05/13/21 18:30	05/14/21 09:30
92538831004	**DUP-1**	Water	05/13/21 00:00	05/14/21 09:30

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SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92538831

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92538831001	**PZ-37D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92538831002	**FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92538831003	**EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92538831004	**DUP-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92538831

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92538831001	**PZ-37D**					
EPA 9315	Radium-226	2.70 ± 0.530 (0.161) C:83% T:NA	pCi/L		06/25/21 10:34	
EPA 9320	Radium-228	2.66 ± 0.740 (0.762) C:64% T:78%	pCi/L		06/07/21 11:16	
Total Radium Calculation	Total Radium	5.36 ± 1.27 (0.923)	pCi/L		06/28/21 17:08	
92538831002	**FB-1**					
EPA 9315	Radium-226	0.0225 ± 0.220 (0.600) C:88% T:NA	pCi/L		06/04/21 08:46	
EPA 9320	Radium-228	0.487 ± 0.440 (0.891) C:60% T:79%	pCi/L		06/07/21 11:16	
Total Radium Calculation	Total Radium	0.510 ± 0.660 (1.49)	pCi/L		06/21/21 20:12	
92538831003	**EB-1**					
EPA 9315	Radium-226	-0.0213 ± 0.200 (0.591) C:92% T:NA	pCi/L		06/04/21 08:46	
EPA 9320	Radium-228	0.247 ± 0.316 (0.669) C:68% T:85%	pCi/L		06/07/21 11:16	
Total Radium Calculation	Total Radium	0.247 ± 0.516 (1.26)	pCi/L		06/21/21 20:12	
92538831004	**DUP-1**					
EPA 9315	Radium-226	2.47 ± 0.489 (0.154) C:91% T:NA	pCi/L		06/25/21 10:34	
EPA 9320	Radium-228	1.70 ± 0.569 (0.728) C:63% T:78%	pCi/L		06/07/21 11:16	
Total Radium Calculation	Total Radium	4.17 ± 1.06 (0.882)	pCi/L		06/28/21 17:08	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92538831

Sample: PZ-37D **Lab ID: 92538831001** Collected: 05/13/21 12:30 Received: 05/14/21 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**2.70 ± 0.530 (0.161) C:83% T:NA**	pCi/L	06/25/21 10:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.66 ± 0.740 (0.762) C:64% T:78%**	pCi/L	06/07/21 11:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**5.36 ± 1.27 (0.923)**	pCi/L	06/28/21 17:08	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
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(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92538831

Sample: FB-1 **Lab ID: 92538831002** Collected: 05/13/21 11:30 Received: 05/14/21 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0225 ± 0.220 (0.600) C:88% T:NA**	pCi/L	06/04/21 08:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.487 ± 0.440 (0.891) C:60% T:79%**	pCi/L	06/07/21 11:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.510 ± 0.660 (1.49)**	pCi/L	06/21/21 20:12	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92538831

Sample: EB-1 **Lab ID: 92538831003** Collected: 05/13/21 18:30 Received: 05/14/21 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0213 ± 0.200 (0.591) C:92% T:NA**	pCi/L	06/04/21 08:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.247 ± 0.316 (0.669) C:68% T:85%**	pCi/L	06/07/21 11:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.247 ± 0.516 (1.26)**	pCi/L	06/21/21 20:12	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92538831

Sample: DUP-1 **Lab ID: 92538831004** Collected: 05/13/21 00:00 Received: 05/14/21 09:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**2.47 ± 0.489 (0.154) C:91% T:NA**	pCi/L	06/25/21 10:34	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.70 ± 0.569 (0.728) C:63% T:78%**	pCi/L	06/07/21 11:16	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**4.17 ± 1.06 (0.882)**	pCi/L	06/28/21 17:08	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92538831

QC Batch: 449716 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92538831001, 92538831002, 92538831003, 92538831004

METHOD BLANK: 2170082 Matrix: Water
Associated Lab Samples: 92538831001, 92538831002, 92538831003, 92538831004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.470 ± 0.364 (0.712) C:62% T:85%	pCi/L	06/07/21 11:17	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92538831

QC Batch: 450480 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92538831001, 92538831002, 92538831003, 92538831004

METHOD BLANK: 2173868 Matrix: Water
Associated Lab Samples: 92538831001, 92538831002, 92538831003, 92538831004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.274 ± 0.327 (0.673) C:95% T:NA	pCi/L	06/04/21 08:45	

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: YATES RADS
Pace Project No.: 92538831

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.

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: YATES RADS
Pace Project No.: 92538831

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92538831001	**PZ-37D**	EPA 9315	450480		
92538831002	**FB-1**	EPA 9315	450480		
92538831003	**EB-1**	EPA 9315	450480		
92538831004	**DUP-1**	EPA 9315	450480		
92538831001	**PZ-37D**	EPA 9320	449716		
92538831002	**FB-1**	EPA 9320	449716		
92538831003	**EB-1**	EPA 9320	449716		
92538831004	**DUP-1**	EPA 9320	449716		
92538831001	**PZ-37D**	Total Radium Calculation	454327		
92538831002	**FB-1**	Total Radium Calculation	453438		
92538831003	**EB-1**	Total Radium Calculation	453438		
92538831004	**DUP-1**	Total Radium Calculation	454327		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project WO# : 92538831

92538831

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other: ☑ Client

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: MT 5/24/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 2.1 °C Correction Factor: Add/Subtract (°C) +0.2

Cooler Temp Corrected (°C): 2.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (international), including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used? -Pace Containers Used?	☑ Yes ☑ Yes	☐ No ☐ No	☐ N/A ☐ N/A	6.
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: W	☑ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of 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, Ultra

**Bottom half of box is to list number of bottles

Project #

WO# : 92538831

PM: KLH1 Due Date: 08/07/21

CLIENT: GR-GR Power

Item #	BP4S-125 mL Plastic Unpreserved (N/A) (CL)	BP3S-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic HNO3 (pH < 2) (CL)	BP3N-250 mL Plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CL)	WGFU-Wide mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CL)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (CL)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG4S-250 mL Amber H2SO4 (pH < 2)	AG4UAS(NA)-250 mL Amber NaHSO4 (N/A)(CL)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9M-40 mL VOA MeOH (N/A)	VG9A (8 vials per kit)-NH4Cl (N/A)	VJG9K (3 vials per kit)-NH4Cl/Na Bis (N/A)	SP5T-125 mL Sterile Plastic (N/A - 14d)	SP5T-250 mL Sterile Plastic (N/A - 14d)	[illegible]	BP4A-250 mL Plastic (NH4)2SO4 (0.9 g)	AG0U-100 mL Amber Unpreserved vials (N/A)	WPDU-30 mL Sterilin Jars (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1																									
2		1	1																									
3		1	1																									
4		1	1																									
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect container).

Pace Analytical

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	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power	Report To: Becky Steever	Attention:
Address: 1020 Bishop Mill Ave	Copy To:	Company Name:
City, GA 30114	Purchase Order #:	Address:
Email:	Project Name: Yates	Pace Quote:
Requested Due Date:	Project #:	Pace Project Manager: kevin.herring@paceanalytical.com
		Pace Profile #: 10940

Regulatory Agency

State / Location: GA

Requested Analysis Filtered (Y/N)

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: App III & IV Metals	TDS	Cl, F, SO4	RAD (61/9315/9320)	Residual Chlorine (Y/N)
PZ-3TD (05136)			5/13	1135																	
FB-01 (05137)			5/13	930																	
EB-01 (05138)			5/13	1835																	
DUP-01 (05139)			5/13	—																	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Becky Steever/Trinity	5/14/21	0930	Collected Trinity	5/14/21	0930	2.2	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Becky Steever

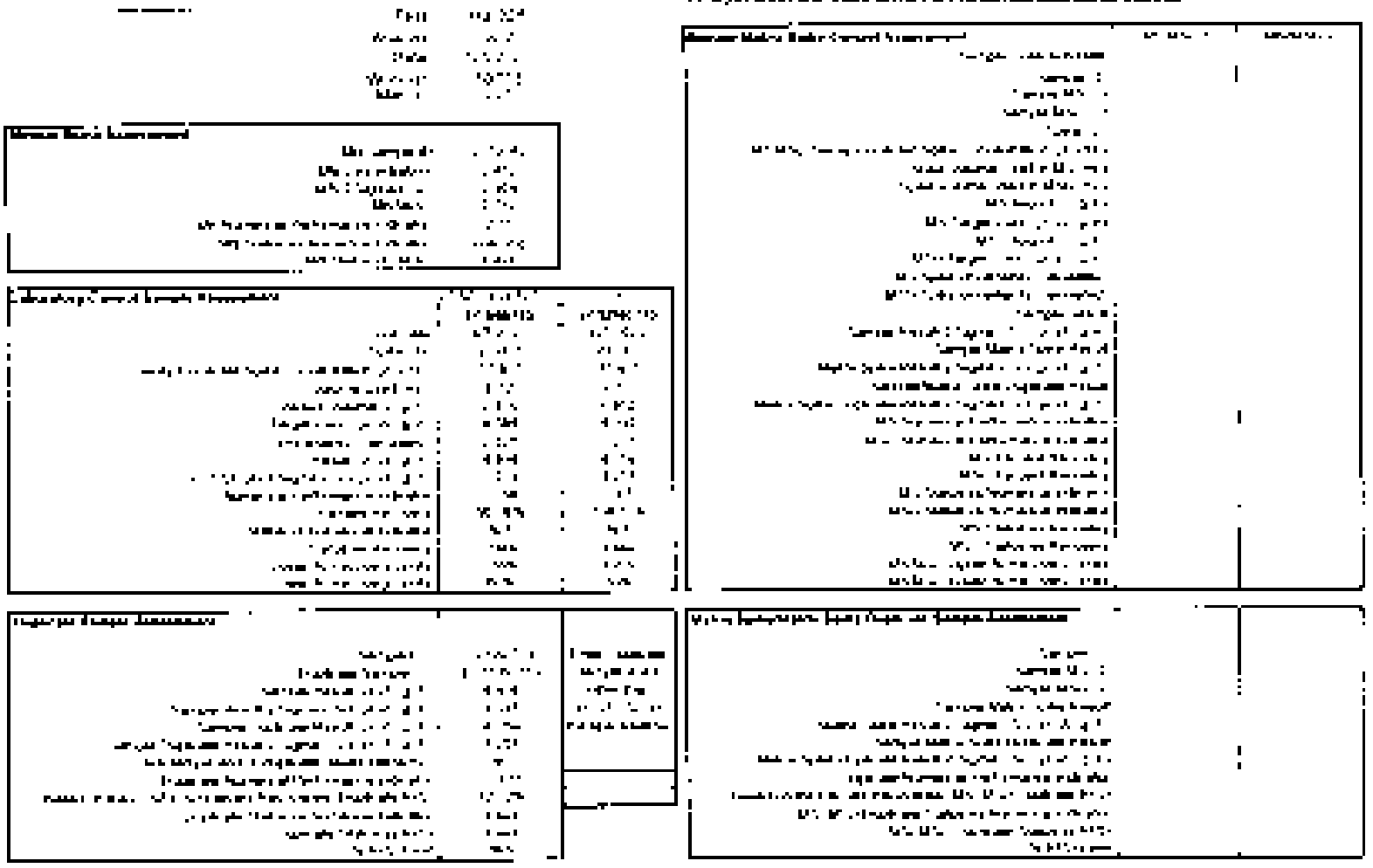
SIGNATURE of SAMPLER: 5/14/21

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Quality Control Sample Performance Assessment

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Quality Control Sample Performance Assessment



Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

May 21, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES
Pace Project No.: 92538834

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on May 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Herring
kevin.herring@pacelabs.com
1(704)875-9092
HORIZON Database Administrator

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES
Pace Project No.: 92538834

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92538834

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92538834001	**PZ-37D**	Water	05/13/21 12:30	05/14/21 09:30
92538834002	**FB-1**	Water	05/13/21 11:30	05/14/21 09:30
92538834003	**EB-1**	Water	05/13/21 18:30	05/14/21 09:30
92538834004	**DUP-1**	Water	05/13/21 00:00	05/14/21 09:30

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SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92538834

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92538834001	**PZ-37D**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92538834002	**FB-1**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92538834003	**EB-1**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92538834004	**DUP-1**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92538834

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92538834001	**PZ-37D**					
	Performed by	CUSTOMER			05/14/21 14:40	
	pH	7.79	Std. Units		05/14/21 14:40	
EPA 6010D	Calcium	68.3	mg/L	1.0	05/18/21 16:27	
EPA 6020B	Antimony	0.00052J	mg/L	0.0030	05/19/21 14:44	B
EPA 6020B	Barium	0.015	mg/L	0.0050	05/19/21 14:44	
EPA 6020B	Boron	1.3	mg/L	0.040	05/19/21 14:44	
EPA 6020B	Lead	0.000049J	mg/L	0.0010	05/19/21 14:44	
EPA 6020B	Lithium	0.011J	mg/L	0.030	05/19/21 14:44	
EPA 6020B	Molybdenum	0.0042J	mg/L	0.010	05/19/21 14:44	
SM 2540C-2011	Total Dissolved Solids	381	mg/L	10.0	05/19/21 08:19	
EPA 300.0 Rev 2.1 1993	Chloride	4.0	mg/L	1.0	05/18/21 01:17	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	05/18/21 01:17	M1
EPA 300.0 Rev 2.1 1993	Sulfate	178	mg/L	3.0	05/18/21 15:11	M1
92538834002	**FB-1**					
EPA 6020B	Antimony	0.0019J	mg/L	0.0030	05/19/21 15:06	B
EPA 6020B	Boron	0.0092J	mg/L	0.040	05/19/21 15:06	
92538834003	**EB-1**					
EPA 6020B	Antimony	0.00067J	mg/L	0.0030	05/19/21 15:12	B
EPA 6020B	Boron	0.0052J	mg/L	0.040	05/19/21 15:12	
92538834004	**DUP-1**					
EPA 6010D	Calcium	71.6	mg/L	1.0	05/18/21 17:24	
EPA 6020B	Antimony	0.00044J	mg/L	0.0030	05/19/21 15:18	B
EPA 6020B	Barium	0.015	mg/L	0.0050	05/19/21 15:18	
EPA 6020B	Boron	1.2	mg/L	0.040	05/19/21 15:18	
EPA 6020B	Lead	0.000040J	mg/L	0.0010	05/19/21 15:18	
EPA 6020B	Lithium	0.011J	mg/L	0.030	05/19/21 15:18	
EPA 6020B	Molybdenum	0.0040J	mg/L	0.010	05/19/21 15:18	
SM 2540C-2011	Total Dissolved Solids	383	mg/L	10.0	05/19/21 08:19	
EPA 300.0 Rev 2.1 1993	Chloride	3.9	mg/L	1.0	05/18/21 02:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	05/18/21 02:24	
EPA 300.0 Rev 2.1 1993	Sulfate	154	mg/L	3.0	05/18/21 15:56	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92538834

Sample: PZ-37D **Lab ID: 92538834001** Collected: 05/13/21 12:30 Received: 05/14/21 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		05/14/21 14:40		
pH	**7.79**	Std. Units			1		05/14/21 14:40		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**68.3**	mg/L	1.0	0.13	1	05/18/21 10:07	05/18/21 16:27	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00052J**	mg/L	0.0030	0.00028	1	05/18/21 13:16	05/19/21 14:44	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	05/18/21 13:16	05/19/21 14:44	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00071	1	05/18/21 13:16	05/19/21 14:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	05/18/21 13:16	05/19/21 14:44	7440-41-7	
Boron	**1.3**	mg/L	0.040	0.0052	1	05/18/21 13:16	05/19/21 14:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	05/18/21 13:16	05/19/21 14:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	05/18/21 13:16	05/19/21 14:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	05/18/21 13:16	05/19/21 14:44	7440-48-4	
Lead	**0.000049J**	mg/L	0.0010	0.000036	1	05/18/21 13:16	05/19/21 14:44	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00081	1	05/18/21 13:16	05/19/21 14:44	7439-93-2	
Molybdenum	**0.0042J**	mg/L	0.010	0.00069	1	05/18/21 13:16	05/19/21 14:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	05/18/21 13:16	05/19/21 14:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	05/18/21 13:16	05/19/21 14:44	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	05/18/21 14:00	05/19/21 11:03	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**381**	mg/L	10.0	10.0	1		05/19/21 08:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.0**	mg/L	1.0	0.60	1		05/18/21 01:17	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		05/18/21 01:17	16984-48-8	M1
Sulfate	**178**	mg/L	3.0	1.5	3		05/18/21 15:11	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92538834

Sample: FB-1 **Lab ID: 92538834002** Collected: 05/13/21 11:30 Received: 05/14/21 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.13	1	05/18/21 10:07	05/18/21 16:37	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0019J**	mg/L	0.0030	0.00028	1	05/18/21 13:16	05/19/21 15:06	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	05/18/21 13:16	05/19/21 15:06	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	05/18/21 13:16	05/19/21 15:06	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	05/18/21 13:16	05/19/21 15:06	7440-41-7	
Boron	**0.0092J**	mg/L	0.040	0.0052	1	05/18/21 13:16	05/19/21 15:06	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	05/18/21 13:16	05/19/21 15:06	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	05/18/21 13:16	05/19/21 15:06	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	05/18/21 13:16	05/19/21 15:06	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	05/18/21 13:16	05/19/21 15:06	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	05/18/21 13:16	05/19/21 15:06	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	05/18/21 13:16	05/19/21 15:06	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	05/18/21 13:16	05/19/21 15:06	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	05/18/21 13:16	05/19/21 15:06	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	05/18/21 14:00	05/19/21 11:12	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		05/19/21 08:19		
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		05/18/21 01:57	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		05/18/21 01:57	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		05/18/21 01:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92538834

Sample: EB-1 **Lab ID: 92538834003** Collected: 05/13/21 18:30 Received: 05/14/21 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.13	1	05/18/21 10:07	05/18/21 16:41	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00067J**	mg/L	0.0030	0.00028	1	05/18/21 13:16	05/19/21 15:12	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	05/18/21 13:16	05/19/21 15:12	7440-38-2	
Barium	ND	mg/L	0.0050	0.00071	1	05/18/21 13:16	05/19/21 15:12	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	05/18/21 13:16	05/19/21 15:12	7440-41-7	
Boron	**0.0052J**	mg/L	0.040	0.0052	1	05/18/21 13:16	05/19/21 15:12	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	05/18/21 13:16	05/19/21 15:12	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	05/18/21 13:16	05/19/21 15:12	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	05/18/21 13:16	05/19/21 15:12	7440-48-4	
Lead	ND	mg/L	0.0010	0.000036	1	05/18/21 13:16	05/19/21 15:12	7439-92-1	
Lithium	ND	mg/L	0.030	0.00081	1	05/18/21 13:16	05/19/21 15:12	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00069	1	05/18/21 13:16	05/19/21 15:12	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	05/18/21 13:16	05/19/21 15:12	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	05/18/21 13:16	05/19/21 15:12	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	0.000078	1	05/18/21 14:00	05/19/21 11:15	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		05/19/21 08:19		
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		05/18/21 02:11	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		05/18/21 02:11	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		05/18/21 02:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92538834

Sample: DUP-1 **Lab ID: 92538834004** Collected: 05/13/21 00:00 Received: 05/14/21 09:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**71.6**	mg/L	1.0	0.13	1	05/18/21 10:07	05/18/21 17:24	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.00044J**	mg/L	0.0030	0.00028	1	05/18/21 13:16	05/19/21 15:18	7440-36-0	B
Arsenic	ND	mg/L	0.0050	0.00078	1	05/18/21 13:16	05/19/21 15:18	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00071	1	05/18/21 13:16	05/19/21 15:18	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000046	1	05/18/21 13:16	05/19/21 15:18	7440-41-7	
Boron	**1.2**	mg/L	0.040	0.0052	1	05/18/21 13:16	05/19/21 15:18	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00012	1	05/18/21 13:16	05/19/21 15:18	7440-43-9	
Chromium	ND	mg/L	0.0050	0.00055	1	05/18/21 13:16	05/19/21 15:18	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00038	1	05/18/21 13:16	05/19/21 15:18	7440-48-4	
Lead	**0.000040J**	mg/L	0.0010	0.000036	1	05/18/21 13:16	05/19/21 15:18	7439-92-1	
Lithium	**0.011J**	mg/L	0.030	0.00081	1	05/18/21 13:16	05/19/21 15:18	7439-93-2	
Molybdenum	**0.0040J**	mg/L	0.010	0.00069	1	05/18/21 13:16	05/19/21 15:18	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0016	1	05/18/21 13:16	05/19/21 15:18	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00014	1	05/18/21 13:16	05/19/21 15:18	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	05/18/21 14:00	05/19/21 11:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**383**	mg/L	10.0	10.0	1		05/19/21 08:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.9**	mg/L	1.0	0.60	1		05/18/21 02:24	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		05/18/21 02:24	16984-48-8	
Sulfate	**154**	mg/L	3.0	1.5	3		05/18/21 15:56	14808-79-8	

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92538834

QC Batch: 621064
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

METHOD BLANK: 3267639 Matrix: Water
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.13	05/18/21 15:25	

LABORATORY CONTROL SAMPLE: 3267640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267641 3267642

Parameter	Units	92538933001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	33100 ug/L	1	1	34.8	33.8	167	75	75-125	3	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.

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92538834

QC Batch: 621135
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

METHOD BLANK: 3268034 Matrix: Water
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	0.00070J	0.0030	0.00028	05/19/21 14:26	
Arsenic	mg/L	ND	0.0050	0.00078	05/19/21 14:26	
Barium	mg/L	ND	0.0050	0.00071	05/19/21 14:26	
Beryllium	mg/L	ND	0.00050	0.000046	05/19/21 14:26	
Boron	mg/L	ND	0.040	0.0052	05/19/21 14:26	
Cadmium	mg/L	ND	0.00050	0.00012	05/19/21 14:26	
Chromium	mg/L	ND	0.0050	0.00055	05/19/21 14:26	
Cobalt	mg/L	ND	0.0050	0.00038	05/19/21 14:26	
Lead	mg/L	ND	0.0010	0.000036	05/19/21 14:26	
Lithium	mg/L	ND	0.030	0.00081	05/19/21 14:26	
Molybdenum	mg/L	ND	0.010	0.00069	05/19/21 14:26	
Selenium	mg/L	ND	0.0050	0.0016	05/19/21 14:26	
Thallium	mg/L	ND	0.0010	0.00014	05/19/21 14:26	

LABORATORY CONTROL SAMPLE: 3268035

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	105	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	101	80-120	
Boron	mg/L	1	1.0	104	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.097	97	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.099	99	80-120	
Lithium	mg/L	0.1	0.10	101	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	
Thallium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3268036 3268037

Parameter	Units	92538834001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	0.00052J	0.1	0.1	0.10	0.11	103	105	75-125	2	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92538834

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3268036 3268037

Parameter	Units	92538834001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.015	0.1	0.1	0.11	0.11	95	98	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.091	0.091	91	91	75-125	0	20	
Boron	mg/L	1.3	1	1	2.5	2.4	118	114	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.098	0.10	97	100	75-125	3	20	
Cobalt	mg/L	ND	0.1	0.1	0.098	0.10	98	102	75-125	4	20	
Lead	mg/L	0.000049J	0.1	0.1	0.096	0.097	96	97	75-125	1	20	
Lithium	mg/L	0.011J	0.1	0.1	0.10	0.10	91	92	75-125	1	20	
Molybdenum	mg/L	0.0042J	0.1	0.1	0.10	0.11	99	104	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.10	0.10	101	101	75-125	0	20	
Thallium	mg/L	ND	0.1	0.1	0.096	0.097	96	97	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92538834

QC Batch: 621085
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

METHOD BLANK: 3267704 Matrix: Water
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	05/19/21 10:53	

LABORATORY CONTROL SAMPLE: 3267705

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267706 3267707

Parameter	Units	92538834001 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	0.0024	93	96	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92538834

QC Batch: 621303 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

METHOD BLANK: 3269201 Matrix: Water
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	05/19/21 08:18	

LABORATORY CONTROL SAMPLE: 3269202

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	397	99	90-111	

SAMPLE DUPLICATE: 3269203

Parameter	Units	92538698003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	56.0	71.0	24	10	D6

SAMPLE DUPLICATE: 3269204

Parameter	Units	92539203003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	76.0	96.0	23	10	D6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92538834

QC Batch: 620938
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: 92538834001, 92538834002, 92538834003, 92538834004

METHOD BLANK: 3267155 Matrix: Water
Associated Lab Samples: 92538834001, 92538834002, 92538834003, 92538834004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	05/17/21 21:42	
Fluoride	mg/L	ND	0.10	0.050	05/17/21 21:42	
Sulfate	mg/L	ND	1.0	0.50	05/17/21 21:42	

LABORATORY CONTROL SAMPLE: 3267156

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.6	99	90-110	
Fluoride	mg/L	2.5	2.4	98	90-110	
Sulfate	mg/L	50	48.3	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267157 3267158

Parameter	Units	92538495031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	ND	50	50	50.6	50.6	101	101	90-110	0	10	
Fluoride	mg/L	ND	2.5	2.5	2.5	2.5	99	98	90-110	0	10	
Sulfate	mg/L	ND	50	50	49.2	49.1	98	98	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3267159 3267160

Parameter	Units	92538834001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.0	50	50	54.1	55.3	100	103	90-110	2	10	
Fluoride	mg/L	0.12	2.5	2.5	2.3	2.4	89	90	90-110	2	10	M1
Sulfate	mg/L	178	50	50	206	199	56	42	90-110	4	10	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES
Pace Project No.: 92538834

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D6	The precision between the sample and sample duplicate exceeded laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92538834

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92538834001	**PZ-37D**				
92538834001	**PZ-37D**	EPA 3010A	621064	EPA 6010D	621124
92538834002	**FB-1**	EPA 3010A	621064	EPA 6010D	621124
92538834003	**EB-1**	EPA 3010A	621064	EPA 6010D	621124
92538834004	**DUP-1**	EPA 3010A	621064	EPA 6010D	621124
92538834001	**PZ-37D**	EPA 3005A	621135	EPA 6020B	621237
92538834002	**FB-1**	EPA 3005A	621135	EPA 6020B	621237
92538834003	**EB-1**	EPA 3005A	621135	EPA 6020B	621237
92538834004	**DUP-1**	EPA 3005A	621135	EPA 6020B	621237
92538834001	**PZ-37D**	EPA 7470A	621085	EPA 7470A	621197
92538834002	**FB-1**	EPA 7470A	621085	EPA 7470A	621197
92538834003	**EB-1**	EPA 7470A	621085	EPA 7470A	621197
92538834004	**DUP-1**	EPA 7470A	621085	EPA 7470A	621197
92538834001	**PZ-37D**	SM 2540C-2011	621303		
92538834002	**FB-1**	SM 2540C-2011	621303		
92538834003	**EB-1**	SM 2540C-2011	621303		
92538834004	**DUP-1**	SM 2540C-2011	621303		
92538834001	**PZ-37D**	EPA 300.0 Rev 2.1 1993	620938		
92538834002	**FB-1**	EPA 300.0 Rev 2.1 1993	620938		
92538834003	**EB-1**	EPA 300.0 Rev 2.1 1993	620938		
92538834004	**DUP-1**	EPA 300.0 Rev 2.1 1993	620938		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: WO# : 92538834

92538834

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other: ☑ Client

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☑ No

Date/Initials Person Examining Contents: 10/5 SW

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice: 2.12

Cooler Temp: _____ Correction Factor: Add/Subtract (°C) +0.12

Cooler Temp Corrected (°C): 2.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☑ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water), DOC, ULYig

**Bottom half of box is to list number of bottles

Project #

WO# : 92538834

PM: KLH1 Due Date: 05/28/21

CLIENT: GA-GR Power

Item #	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG2U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3AB0SMU 250 mL Amber NaHCO (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpres (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VG9A-40 mL VOA H2SO4 (N/A)	VJGU-(3 vials per kit)-VOA kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - Cl)	SP5T-250 mL Sterile Plastic (N/A - Cl)	[illegible]	BP3A-250 mL Plastic (NH4)2SO4 (5.5-6.7)	AG0U-500 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Sterile Septum vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																							2					
2																							2					
3																							2					
4																							2					
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power	Report To: Becky Steever	Attention:
Address: 1070 Bridge Mill Ave	Copy To:	Company Name:
City, GA 30114		Address:
	Purchase Order #:	Pace Quote:
Phone: (770) 844-8535 Fax:	Project Name: Yates	Pace Project Manager: kevin.feeley@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency: GA

Requested Analysis Filtered (Y/N)

SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	Valid Codes (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Y/N	Analyses Test: App III & IV Metals	TDS	Cl, F, SO4	RAD 9315/9320	Residual Chlorine (Y/N)
P2-37D (051321)			5/13	1230																		
FB-01 (051321)			5/13	1130																		
FB-01 (051332)			5/13	1830																		
DUP-01 (051321)			5/13	—																		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Becky Steever/Stacks	5/14/21	0813	[illegible]	5/17/21	0910	2.2	Y	N	Y

SAMPLER NAME AND SIGNATURE

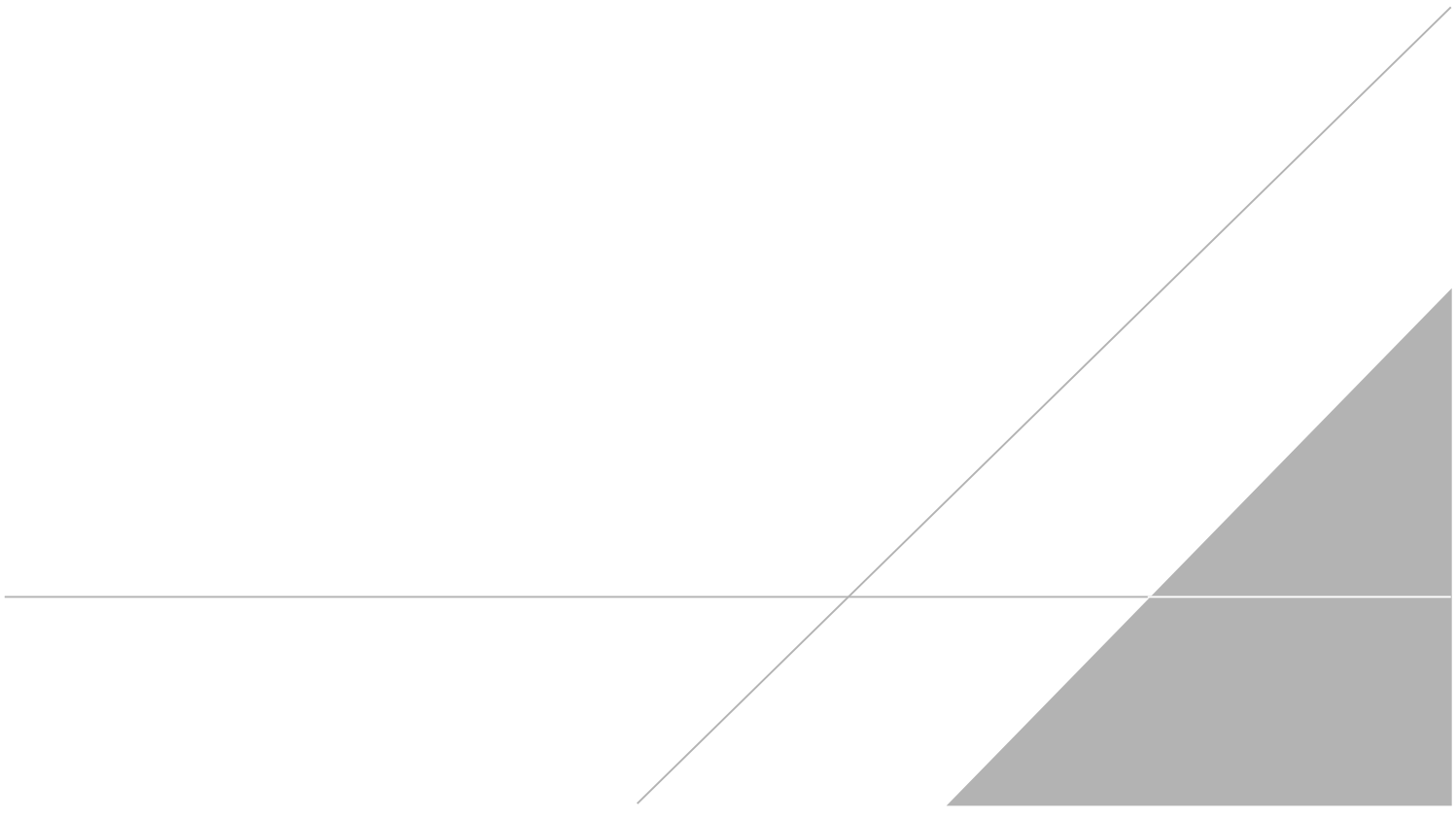
PRINT Name of SAMPLER: Becky Steever

SIGNATURE of SAMPLER: [signature] DATE Signed: 5/14/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

August and September 2021

Semiannual Event



Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92557719, 92557720, 92558240, 92558246, 92558254, 92558259, 92563755, and 92563762 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:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92557719 92557720	YGWC-42	92557719001 92557720001	Water	8/25/2021		X	X	X
	PZ-37	92557719002 92557720002	Water	8/25/2021		X	X	X
	AMA-DUP-4	92557719003 92557720003	Water	8/25/2021	PZ-37	X	X	X
	YGWC-23S	92557719004 92557720004	Water	8/25/2021		X	X	X
92558240 92558254	AMA-EB-1	92558240010 92558254010	Water	8/26/2021		X	X	X
	AMA-EB-2	92558240011 92558254011	Water	8/27/2021		X	X	X
	AMA-DUP-1	92558240012 92558254012	Water	9/1/2021	YGWC-24SA	X	X	X
	YGWC-24SA	92558240013 92558254013	Water	9/1/2021		X	X	X
	YGWC-36A	92558240015 92558254015	Water	9/3/2021		X	X	X
	YAMW-3	92558254016	Water	9/3/2021			X	X
	PZ-37D	92558240016 92558254017	Water	9/3/2021		X	X	X
92558246 92558259	AMA-EB-1	92558246001 92558259001	Water	8/26/2021		X	X	X

Georgia Power Co. – Plant Yates

Data Review Report

Metals, Radium, and General Chemistry Analyses

SDGs #92557719, 92557720, 92558240, 92558246, 92558254, 92558259, 92563755, and 92563762

Analyses Performed By:
Pace Analytical Services – Asheville, North Carolina
Pace Analytical Services – Peachtree Corners, Georgia
Pace Analytical Services – Greensburg, Pennsylvania

Report #43280R
Review Level: Tier II
Project: 30052922.00004

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
	AMA-FB-1	92558246002 92558259002	Water	8/25/2021		X	X	X
	YAMW-4	92558246003 92558259003	Water	8/25/2021		X	X	X
	YGWC-41	92558246004 92558259004	Water	8/26/2021		X	X	X
	AMA-DUP-2	92558246005 92558259005	Water	8/26/2021	YGWC-41	X	X	X
	YAMW-5	92558246006 92558259006	Water	8/26/2021		X	X	X
	YGWC-38	92558246007 92558259007	Water	8/26/2021		X	X	X
	YAMW-1	92558246008 92558259008	Water	9/1/2021		X	X	X
	PZ-35	92558246009 92558259009	Water	9/1/2021		X	X	X
	YAMW-2	92558246010 92558259010	Water	9/1/2021		X	X	X
	YGWC-49	92558246011 92558259011	Water	9/1/2021		X	X	X
92563755 92563762	YGWC-43	92563755001 92563762001	Water	9/27/2021		X	X	X

Notes:

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) and alkalinity analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA = quality assurance

Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B, SM2540C, and SM2320B; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - * Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Metals Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

SDGs #92557720, 92558254, and 92558259: Metals were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

SDG #92563762: 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
YGWC-43	Mercury (MB)	Detected sample results <RL and <BAL	“UB” at the RL

Notes:
MB = Method 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.

SDG #92557720: The MS/MSD analysis performed using sample YGWC-42 in association with SW-846 6010D analysis. The concentrations of calcium, magnesium, potassium, and sodium in the unspiked sample were greater than four-times the amount of spike added; hence the recoveries were not evaluated, and no qualification of the results was required.

SDG #92558259: The MS/MSD analysis performed using sample YAMW-4 in association with SW-846 6010D analysis. The concentrations of magnesium and sodium in the unspiked sample were greater than four-times the amount of spike added; hence the recoveries were not evaluated, and no qualification of the results was required.

SDG #92558259: The MS/MSD analysis performed using sample YAMW-2 in association with SW-846 6010D analysis exhibited recoveries within the control limits.

SDG #92557720: The MS/MSD analysis performed using sample YGWC-23S in association with SW-846 6020B analysis exhibited recoveries within the control limits.

SDG #92558259: The MS/MSD analysis performed using sample YGWC-38 in association with SW-846 6020B analysis. The concentration of boron in the unspiked sample was greater than four-times the amount of spike added; hence the recoveries were not evaluated, and no qualification of the result was required.

SDGs #92557720 and 92558259: The MS/MSD analysis performed using sample YGWC-42 and YAMW-4 in association with SW-846 7470A analysis exhibited recoveries within the control limits.

SDGs #92558254 and 92563762: MS/MSD analysis was not performed using a sample from these SDGs.

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.

SDGs #92557720 and 92558259: MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

SDGs #92558254 and 92563762: Laboratory duplicate or MS/MSD analysis was not performed using a sample from these SDGs.

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
PZ-37 / AMA-DUP-4	Potassium	7.3	7.5	2.7%
	Sodium	34.6	35.3	2.0%
	Calcium	106	108	1.9%
	Magnesium	53.1	54.7	3.0%
	Barium	0.035	0.036	2.8%
	Boron	10.3	10.4	1.0%
	Selenium	0.20	0.20	0.0%
	Arsenic	0.0014 J	0.0016 J	AC
	Beryllium	0.00059	0.00059	
	Cadmium	0.00094	0.00093	
	Cobalt	0.0068	0.0060	
	Lithium	0.023 J	0.022 J	
	Molybdenum	0.0011 J	0.0011 J	
YGWC-24SA / AMA-DUP-1	Calcium	2.3	2.2	AC
	Barium	0.025	0.024	
	Beryllium	0.00014 J	0.00015 J	
YGWC-41 / AMA-DUP-2	Calcium	12.8	12.2	4.8%
	Boron	3.3	3.3	0.0%
	Selenium	0.027	0.027	0.0%
	Barium	0.018	0.018	AC
	Beryllium	0.0012	0.0012	
	Lithium	0.0021 J	0.0021 J	

Note:
AC = Acceptable

The differences in the results between the parent sample PZ-37 and field duplicate sample AMA-DUP-4 were acceptable.

The differences in the results between the parent sample YGWC-24SA and field duplicate sample AMA-DUP-1 were acceptable.

The differences in the results between the parent sample YGWC-41 and field duplicate sample AMA-DUP-2 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) Cold Vapor Atomic Absorption (CVAA)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X	X		
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

General Chemistry Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids (TDS) by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Alkalinity by SM2320B	Water	14 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

SDGs #92557720 and 92558254: The MS/MSD analysis performed using samples YGWC-23S and PZ-37D in association with alkalinity analysis exhibited recoveries within the control limits.

SDG #92558259: MS/MSD analysis was not performed using a sample from this SDG in association with alkalinity analysis.

SDGs #92557720, 92558254, 92558259, and 92563762: MS/MSD analysis was not performed using a sample from these SDGs in association with anions analysis.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

SDGs #92557720 and 92558259: The laboratory duplicate analysis performed using samples AMA-DUP-4 and YGWC-49 in association with TDS analysis exhibited an RPD within the control limit.

SDGs #92558254 and 92563762: Laboratory duplicate analysis was not performed using a sample from these SDGs in association with TDS analysis.

SDGs #92557720 and 92558254: MS/MSD analysis was performed in replacement of the laboratory duplicate analysis in association with alkalinity analysis. The MS/MSD recoveries exhibited acceptable RPDs.

SDG #92558259: Laboratory duplicate or MS/MSD analysis was not performed using a sample from this SDG in association with alkalinity analysis.

SDGs #92557720, 92558254, 92558259, and 92563762: Laboratory duplicate or MS/MSD analysis was not performed using a sample from these SDGs in association with anions analysis.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
PZ-37 / AMA-DUP-4	TDS	876	822	6.4%
	Chloride	7.0	6.9	1.4%
	Sulfate	472	470	0.4%
YGWC-24SA / AMA-DUP-1	TDS	96.0	81.0	16.9%
	Chloride	8.9	8.9	0.0%
YGWC-41 / AMA-DUP-2	TDS	225	232	3.1%

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Sulfate	117	117	0.0%
	Chloride	3.6	3.6	AC

Note:
AC = Acceptable

The differences in the results between the parent sample PZ-37 and field duplicate sample AMA-DUP-4 were acceptable.

The differences in the results between the parent sample YGWC-24SA and field duplicate sample AMA-DUP-1 were acceptable.

The differences in the results between the parent sample YGWC-41 and field duplicate sample AMA-DUP-2 were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for General Chemistry

General Chemistry: SM4500-H+ B, SM2540C, SM2320B. USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

Radiological Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits (±2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

Note:
* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of < ±3 sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x_0 = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

MS analysis was not performed using a sample from these SDGs.

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:

$$Z_{lab} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

x_1, x_2 = two measured activity concentrations.

$u^2(x_1)$, $u^2(x_2)$ = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

Laboratory duplicate analysis was not performed using a sample from these SDGs.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in soil matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
PZ-37 / AMA-DUP-4	Radium-226	1.04 ± 0.306	0.541 ± 0.221	AC
	Radium-228	0.371 ± 0.500	0.733 ± 1.11	
	Total Radium	1.41 ± 0.806	1.27 ± 0.785	
YGWC-24SA / AMA-DUP-1	Radium-226	0.119 ± 0.117	0.173 ± 0.135	AC
	Radium-228	0.325 ± 0.383	0.961 ± 0.437	
	Total Radium	0.444 ± 0.500	1.13 ± 0.572	

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWC-41 / AMA-DUP-2	Radium-226	0.0164 ± 0.165	0.0779 ±0.202	AC
	Radium-228	0.340 ± 0.363	0.230 ± 0.343	
	Total Radium	0.356 ± 0.528	0.308 ± 0.545	

Note:
AC = Acceptable

The differences in the results between the parent sample PZ-37 and field duplicate sample AMA-DUP-4 were acceptable.

The differences in the results between the parent sample YGWC-24SA and field duplicate sample AMA-DUP-1 were acceptable.

The differences in the results between the parent sample YGWC-41 and field duplicate sample AMA-DUP-2 were acceptable.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$ = combined standard uncertainty of the result squared.

$u^2(c)$ = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- SDG #92557719: YGWC-42 and YGWC-23S; SDG #92558240: AMA-EB-1, AMA-EB-2, YGWC-24SA, and YGWC-36A; SDG #92558246: AMA-EB-1, AMA-FB-1, YAMW-4, YGWC-41, AMA-DUP-2, YGWC-38, YAMW-1, PZ-35, YAMW-2, and YGWC-49 – Radium-226, Radium-228, and total Radium
- SDG #92557719: AMA-DUP-4; SDG #92558246: YAMW-5 – Radium-228 and total Radium
- SDG #92557719: PZ-37; SDG #92563755: YGWC-43 – Radium-228
- SDG #92558240: AMA-DUP-1 – Radium-226

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for Radiologicals

Radiologicals: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: November 24, 2021

PEER REVIEW: Dennis Capria

DATE: December 2, 2021

Chain of Custody / Data Qualifier Summary Table

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 3

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-RII D/C
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole DiGeo
Pace Profile #:	10640

Regulatory Agency: GDR

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: Y/N	Requested Analysis Filtered (Y/N): TDS 2540C	Arsenic 3500 D	App III Metals	App. IV Metals (Pro Fit)	Radium 226/228, 9315/9320	Alkalinity (2320B)	Calcium (Ma, K, Mg, Cn)	Mercury (1470A)				Residual Chlorine (Y/N)	
1	YGWC-4C	MT	G	8/25	1355				6										X X X X X X X X									
2	YGWC-4D	MT	G																X X X X X X X X									
3	YMW-2	MT	G																X X X X X						X			
4	[illegible]	MT	G	8/25					3																			
5	YMW-4	MT	G																X X X X X X X X									
6	YMW-5	MT	G																X X X X X X X X									
7	YD-07	MT	G																X X X X X X X X									
8	YMW-DUP-4	MT	G																X X X X X						X			
9	YD-DPD	MT	G																X X X X X X X X									
10	YMW-1	MT	G																X X X X X X X X									
11	YD-08	MT	G																X X X X X X X X									
12		MT	G																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Arsenic Suite 300.0 (Cl, F, Sulfate)	[signature] (Arcadis)	8/25/21	1540	[signature]	8/25/21	1540	
App I Metals: Boron (6020B, Ca (6010C)	[signature]	8/25/21	17:15	[signature]	8/25/21	1715	ISO Y N Y
App IV Metals (6020B): Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Professor

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-25-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 3

Section A — Required Client Information:
- Company: Georgia Power
- Address: Atlanta, GA
- Email To: SCS and Arcadis Contacts
- Phone: | Fax:
- Requested Due Date: 10 Day

Section B — Required Project Information:
- Report To: SCS Contacts
- Copy To: Arcadis Contacts
- Purchase Order #:
- Project Name: Yates AMA-R6 Cu/
- Project Number:

Section C — Invoice Information:
- Attention: Southern Co.
- Company Name:
- Address:
- Pace Quote:
- Pace Project Manager: Kevin Herring/Nicole D'Oleo
- Pace Profile #: 10840

Regulatory Agency: CCR
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Start Date	Start Time	End Date	End Time	TDS 2540C	Anions Suite 300.0	App III Metals	App. IV Metals (No Tl)	Radium 226/228	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)	Residual Chlorine (Y/N)
1	YGWC-42	WT	G					x	x	x	x	x	x	x	x	pH:
2	YGWC-43	WT	G					x	x	x	x	x	x	x	x	pH:
3	YAMW-2	WT	G					x	x	x	x	x			x	pH:
4	YAMW-3	WT	G										x	x		pH:
5	YAMW-4	WT	G					x	x	x	x	x	x	x	x	pH:
6	YAMW-5	WT	G					x	x	x	x	x	x	x	x	pH:
7	PZ-37	WT	G	8/25	1230			x	x	x	x	x	x	x	x	pH: 5.48
8	AMA-DUP-4	WT	G	8/25	—			x	x	x	x	x			x	pH: 5.48
9	PZ-37D	WT	G					x	x	x	x	x	x	x	x	pH:
10	YAMW-1	WT	G					x	x	x	x	x	x	x	x	pH:
11	PZ-35	WT	G					x	x	x	x	x	x	x	x	pH:
12		WT	G													

ADDITIONAL COMMENTS
- Anions Suite 300.0 (Cl, F, Sulfate)
- App III Metals: Boron 6020B, Ca 6010D
- App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
[signature] Arcadis	8/25/21	1550	[signature]	8/25/21	1550				
[illegible]	8/25/21	1715	Chandler Fields	8/25/21	1715	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE
- PRINT Name of SAMPLER: Jake Swanson
- SIGNATURE of SAMPLER: [signature]
- DATE Signed: 8/25/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 3 of 3

Section A – Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B – Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-RS [illegible]
Project Number:	

Section C – Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10640

Regulatory Agency
CCR
State / Location
GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Start Date	Start Time	End Date	End Time	# of Containers	TDS 2450	Anions Suite 9056	App III Metals	App IV Metals (No Tl)	Radium (9315/9320)	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine / pH
1	AMA-EB-1	WT	G						x	x	x	x	x			–
2	AMA-EB-2	WT	G						x	x	x	x	x			–
3	AMA-FB-1	WT	G	8/25				5	x	x	x	x	x			–
4	AMA-FB-2	WT	G						x	x	x	x	x			–
5	YGWC-25B	WT	G	8/25	1550			5	x	x	x	x	x	x	x	pH 5.46
6	YGWC-24SA	WT	G						x	x	x	x	x			pH
7	AMA-DUP-1	WT	G		–				x	x	x	x	x			pH
8	YGWC-36A	WT	G						x	x	x	x	x	x	x	pH
9	YGWC-49	WT	G						x	x	x	x	x			pH
10	YGWC-38	WT	G						x	x	x	x	x	x	x	pH
11	YGWC-47	WT	G						x	x	x	x	x	x	x	pH
12	AMA-DUP-2	WT	G		–				x	x	x	x	x			pH

Preservatives: Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other

ADDITIONAL COMMENTS

Anions Suite 300.0 (Cl, F, Sulfate)

App III Metals: Boron 6020B, Ca 6010D

App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
[signature] Arcadis	8/25/2[illegible]	1550	[signature]	8/25/2[illegible]	1550				
[signature]	[illegible]	1715	[signature]	[illegible]	1715	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible handwriting]

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/25/2[illegible]

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 Of 2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: [illegible]	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates [illegible]	Pace Project Manager: [illegible]@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO_4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1045				5	✓		✓							x	x	x	x			Ph: 5.27
14	~~[illegible]~~ YGWA-18S	WT		8/26	1535				5	✓		✓							x	x	x	x			Ph: 4.40
15	YGWA-19S	WT		8/27	0955				5	✓		✓							x	x	x	x			Ph: 5.40
16	YGWA-20S	WT		8/27	1310				5	✓		✓							x	x	x	x			Ph: 5.57
17	YGWA-21I	WT																	x	x	x	x			
18	YGWC-23S	WT																	x	x	x	x	x		
19	YGWC-24SA	WT																	x	x	x	x			
20	AMA-DUP-1	WT																	x	x	x	x			
21	YGWC-36A	WT																	x	x	x	x	x		
22	YGWC-49	WT																	x	x	x	x			
23	AMA-EB-1			8/26	1800				5										X	X	X	X			
24	AMA-EB-2			8/27	1330				5										X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Arcadis	8/27		[signature]	8/27	4:40	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : of

Section A — Required Client Information:
Company: Georgia Power
Address: Atlanta, GA
Email To: SCS Contacts
Phone: Fax
Requested Due Date: 10 Day

Section B — Required Project Information:
Report To: SCS Contacts
Copy To:
Purchase Order #:
Project Name:
Project Number:

Section C — Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kelvin Haning/Nicole D'Oleo
Pace Profile #: 10940

Regulatory Agency: GCR
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9, -) Sample IDs must be unique)	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	VOC	Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
1		WT													
2		WT													
3		WT													
4		WT													
5		WT													
6		WT													
7		WT													
8		WT													
9		WT													
10	AE-DUP-1	WT		9/1	—				5	HCl					
11	AE-245R	WT		9/1	1025				5	HCl					5.22
12	AE-21E	WT		9/1	1150				5	HCl					6.65

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Analyte Suite 3000 (Cl, F, sulfate)	Pace	9/2/12	1530	[illegible]	9/2/12	1530	
App I Metals - Boron (B2O3 Ca,B2H2O		9/2/12	1702	[illegible]	9/2/12	1702	
App IV Metals (CCR): Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: J.E. Swanson

SIGNATURE of SAMPLER: [signature]

DATE Signed: 9/2/12

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 2

Section A – Required Client Information:

Company:	Arcadis (GA Power)
Address:	2839 Paces Ferry Rd
	Suite 900, Atlanta, GA 30339
Email:	
Phone:	Fax:
Requested Due Date:	

Section B – Required Project Information:

Report To:	[illegible]
Copy To:	
Purchase Order #:	
Project Name:	Yates AMA
Project #:	

Section C – Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	[illegible]@pacelabs.com
Pace Profile #:	[illegible]

Regulatory Agency
State / Location
GA

Requested Analysis Filtered (Y/N)

Analyses (handwritten column headings, partly legible): [illegible], Alkalinity

ITEM #	SAMPLE ID	MATRIX CODE	Collected Start DATE	Collected Start TIME	# OF CONTAINERS	Analyses	Residual Chlorine (Y/N) / Notes
13	YGWC-2[illegible] (crossed out)	WT				X	
14	YGWC-2[illegible] (crossed out)	WT				X	
15	AP-2-DUP-1 (crossed out)	WT				X	
16	YGWC-2[illegible] (crossed out)	WT				X	
17	YGWC-2[illegible] (crossed out)	WT				X	
18	YGWC-2[illegible] (crossed out)	WT				X	
19	YGWC-2[illegible] (crossed out)	WT				X	
20	[illegible] (crossed out)	WT				X	
21	YGWC-36A		9/3	1400	6	X X X X X X	pH: 5.06
22	?ARW-3		9/3	1005	2	X X	pH: 5.74
23	PZ-37D		9/3	1020	5	X X X X X	pH: 2.44 (?)
24							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / Arcadis	9/3	1750	[signature] / Pace	9/3/21	1725	4.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [handwritten name, illegible]

SIGNATURE of SAMPLER: [signature]

DATE Signed: 9/3/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: of

Section A — Required Client Information:

Company: Georgia Power
Address: Atlanta, GA
Email To: SCS and Arcadis Contacts
Phone: Fax:
Requested Due Date: 10 Day

Section B — Required Project Information:

Report To: SCS Contacts
Copy To: Arcadis Contacts
Purchase Order #:
Project Name: Yates AMA-R6
Project Number:

Section C — Invoice Information:

Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring/Nicole D'Oleo
Pace Profile #: 10840

Regulatory Agency: CCR
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start Date	Collected Start Time	Collected End Date	Collected End Time	# of Containers	Unpreserved	HNO3	Analyses Test: TDS, Anions, App III Metals, App IV Metals, Radium 226/228, Alkalinity, Cations	Residual Chlorine (Y/N)	
1	AMA-ES-1	WT	G	8-26-21	1435				2	3			
2	[illegible] (struck through)	WT	G										
3	AMA-FB-1	WT	G	8-25-21	1400				2	3			
4	[illegible] (struck through)	WT	G										
5	[illegible] (struck through)	WT	G										pH
6	[illegible] (struck through)	WT	G										pH
7	[illegible] (struck through)	WT	G		-								pH
8	[illegible] (struck through)	WT	G										pH
9	[illegible] (struck through)	WT	G										pH
10	[illegible] (struck through) YAMW-4	WT	G	8-25-21	1130				2	3			pH 6.79
11	[illegible]	WT	G	8-26-21	1025				2	3			pH 6.77
12	AMA-DUP-2	WT	G	8-26-21	-				2	3			pH —

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions: Suite 300.0 (Cl, F, Sulfate)	[signature] / Arcadis	8-26-21	1410	[signature]	8/26	1410	
App III Metals: Boron 6020B, Ca 6010D	[signature]	8/27	1640	[signature]	8/27/21	1640	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Kevin Pukenicz
SIGNATURE of SAMPLER: [signature] DATE Signed: 8-26-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: [illegible]	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates [illegible]	Pace Project Manager: [illegible]@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: [illegible]

Regulatory Agency
State / Location
GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique.

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWC-41	WT																				x					
14	YGWC-42	WT																				x					
15	YGWC-43	WT																				x					
16	YAMW-5			8/26	1125				5										X	X				X	X		PH:5.35
17	YGWC-38			8/26	1240				5										X	X		X		X			PH:4.54
18																											
19																											
20																											
21																											
22																											
23																											
24																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	8/27		[signature]	8/27/21	[illegible]	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 Of 2

Section A — Required Client Information:
Company: Arcadis (GA Power)
Address: 3536 Piedmont Rd NE Suite 300, Atlanta, GA 30305
Email:
Phone: Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Becky Stalcup
Copy To:
Purchase Order #:
Project Name: Yates RD ELG pit
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	Cl-, SO4	Apx Ident Metals	Ident + Quantify	RAD 9315/9320	Alkalinity	Analyses Test	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)
13		WT																								
14		WT																								
15		WT																								
16	YAPMW-1			9/1/21	1330				5	X		X						X	X	X	X	X	X		5.57 pH	
17	P2-35			9/1/21	1400				5	X		X						X	X	X	X	X	X		6.32 pH	
18	YAPMW-2			9/1/21	1455				5	X		X						X	X	X	X	X			6.67 pH	
19	YAPMW-49			9/1/21	1530				5	X		X						X	X	X	X	X			5.15 pH	
20																										
21																										
22																										
23																										
24																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		9/2/21	1530		9/2/21	1530	
		9/2/21	1700		9/2/21	1700	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mary Chest

SIGNATURE of SAMPLER: DATE Signed: 9/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at [illegible]

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: [illegible]	Report To: [illegible]	Attention:
Address: [illegible]	Copy To: [illegible]	Company Name:
[illegible]	[illegible handwriting]	Address:
Email: [illegible]	Purchase Order #:	Pace Quote:
Phone: / Fax:	Project Name: [illegible]	Pace Project Manager: [illegible]
Requested Due Date:	Project #:	Pace Profile #: [illegible]

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE	SAMPLE TYPE	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	[illegible]	TDS	Cl, F, SO4	[illegible]	Residual Chlorine (Y/N)
1	[illegible]	WT				[illegible]	[illegible]			✓		✓							X	X	X	X	
2		WT																	X	X	X	X	
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
pH 6.48 / TURB 0.44 / 1st SAMPLE	[signature]	[illegible]	[illegible]	[signature]	[illegible]	[illegible]	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92557719	No qualifiers assigned						
92557720	No qualifiers assigned						
92558240	No qualifiers assigned						
92558246	No qualifiers assigned						
92558254	No qualifiers assigned						
92558259	No qualifiers assigned						
92563755	No qualifiers assigned						
92563762	YGWC-43	SW846 7470A	Mercury	0.00020	mg/L	UB	Blank contamination

Abbreviations:
mg/L = milligrams per liter

Qualifiers:
UB = not detected due to blank contamination

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 15, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES AMA-R6
Pace Project No.: 92558259

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 27, 2021 and September 02, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES AMA-R6
Pace Project No.: 92558259

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92558259001	**AMA-EB-1**	Water	08/26/21 14:35	08/27/21 16:40
92558259002	**AMA-FB-1**	Water	08/25/21 18:00	08/27/21 16:40
92558259003	**YAMW-4**	Water	08/25/21 17:50	08/27/21 16:40
92558259004	**YGWC-41**	Water	08/26/21 10:25	08/27/21 16:40
92558259005	**AMA-DUP-2**	Water	08/26/21 00:00	08/27/21 16:40
92558259006	**YAMW-5**	Water	08/26/21 11:25	08/27/21 16:40
92558259007	**YGWC-38**	Water	08/26/21 12:40	08/27/21 16:40
92558259008	**YAMW-1**	Water	09/01/21 10:36	09/02/21 17:02
92558259009	**PZ-35**	Water	09/01/21 12:00	09/02/21 17:02
92558259010	**YAMW-2**	Water	09/01/21 13:50	09/02/21 17:02
92558259011	**YGWC-49**	Water	09/01/21 15:30	09/02/21 17:02

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92558259001	**AMA-EB-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259002	**AMA-FB-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259003	**YAMW-4**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259004	**YGWC-41**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259005	**AMA-DUP-2**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259006	**YAMW-5**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259007	**YGWC-38**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259008	**YAMW-1**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259009	**PZ-35**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259010	**YAMW-2**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558259011	**YGWC-49**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558259003	**YAMW-4**					
	Performed by	CUSTOMER			08/30/21 10:23	
	pH	6.79	Std. Units		08/30/21 10:23	
EPA 6010D	Potassium	6.1	mg/L	0.20	09/09/21 17:14	
EPA 6010D	Sodium	24.9	mg/L	1.0	09/09/21 17:14	M1
EPA 6010D	Calcium	11.0	mg/L	1.0	09/09/21 17:14	
EPA 6010D	Magnesium	36.1	mg/L	0.050	09/09/21 17:14	M1
EPA 6020B	Barium	0.0037J	mg/L	0.0050	09/09/21 20:41	
EPA 6020B	Boron	2.8	mg/L	0.20	09/10/21 12:01	
EPA 6020B	Cobalt	0.00041J	mg/L	0.0050	09/09/21 20:41	
EPA 6020B	Lithium	0.033	mg/L	0.030	09/09/21 20:41	
EPA 6020B	Molybdenum	0.0081J	mg/L	0.010	09/09/21 20:41	
EPA 6020B	Selenium	0.019	mg/L	0.0050	09/09/21 20:41	
SM 2540C-2011	Total Dissolved Solids	332	mg/L	10.0	08/31/21 16:25	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	61.4	mg/L	5.0	09/03/21 20:11	
SM 2320B-2011	Alkalinity, Total as CaCO3	61.4	mg/L	5.0	09/03/21 20:11	
EPA 300.0 Rev 2.1 1993	Chloride	1.5	mg/L	1.0	09/06/21 09:55	
EPA 300.0 Rev 2.1 1993	Sulfate	164	mg/L	4.0	09/06/21 16:51	
92558259004	**YGWC-41**					
	Performed by	CUSTOMER			08/30/21 10:23	
	pH	6.77	Std. Units		08/30/21 10:23	
EPA 6010D	Potassium	2.3	mg/L	0.20	09/09/21 18:08	
EPA 6010D	Sodium	13.5	mg/L	1.0	09/09/21 18:08	
EPA 6010D	Calcium	12.8	mg/L	1.0	09/09/21 18:08	
EPA 6010D	Magnesium	16.5	mg/L	0.050	09/09/21 18:08	
EPA 6020B	Barium	0.018	mg/L	0.0050	09/09/21 20:47	
EPA 6020B	Beryllium	0.0012	mg/L	0.00050	09/09/21 20:47	
EPA 6020B	Boron	3.3	mg/L	0.20	09/10/21 12:07	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	09/09/21 20:47	
EPA 6020B	Selenium	0.027	mg/L	0.0050	09/09/21 20:47	
SM 2540C-2011	Total Dissolved Solids	225	mg/L	10.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	3.6	mg/L	1.0	09/06/21 10:11	
EPA 300.0 Rev 2.1 1993	Sulfate	117	mg/L	3.0	09/06/21 17:06	
92558259005	**AMA-DUP-2**					
EPA 6010D	Calcium	12.2	mg/L	1.0	09/09/21 18:12	
EPA 6020B	Barium	0.018	mg/L	0.0050	09/09/21 20:53	
EPA 6020B	Beryllium	0.0012	mg/L	0.00050	09/09/21 20:53	
EPA 6020B	Boron	3.3	mg/L	0.20	09/10/21 12:13	
EPA 6020B	Lithium	0.0021J	mg/L	0.030	09/09/21 20:53	
EPA 6020B	Selenium	0.027	mg/L	0.0050	09/09/21 20:53	
SM 2540C-2011	Total Dissolved Solids	232	mg/L	10.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	3.6	mg/L	1.0	09/06/21 10:27	
EPA 300.0 Rev 2.1 1993	Sulfate	117	mg/L	3.0	09/06/21 17:22	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558259006	**YAMW-5**					
	Performed by	CUSTOMER			08/30/21 10:25	
	pH	5.35	Std. Units		08/30/21 10:25	
EPA 6010D	Calcium	45.0	mg/L	1.0	09/09/21 18:17	
EPA 6020B	Barium	0.036	mg/L	0.0050	09/09/21 20:58	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	09/09/21 20:58	
EPA 6020B	Boron	5.9	mg/L	0.20	09/10/21 12:19	
EPA 6020B	Cadmium	0.00021J	mg/L	0.00050	09/09/21 20:58	
EPA 6020B	Lithium	0.015J	mg/L	0.030	09/09/21 20:58	
EPA 6020B	Selenium	0.055	mg/L	0.0050	09/09/21 20:58	
SM 2540C-2011	Total Dissolved Solids	570	mg/L	20.0	08/31/21 16:51	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	13.0	mg/L	5.0	09/07/21 15:23	
SM 2320B-2011	Alkalinity, Total as CaCO3	13.0	mg/L	5.0	09/07/21 15:23	
EPA 300.0 Rev 2.1 1993	Chloride	3.9	mg/L	1.0	09/06/21 10:43	
EPA 300.0 Rev 2.1 1993	Sulfate	338	mg/L	8.0	09/06/21 18:10	
92558259007	**YGWC-38**					
	Performed by	CUSTOMER			08/30/21 10:25	
	pH	4.54	Std. Units		08/30/21 10:25	
EPA 6010D	Potassium	4.4	mg/L	0.20	09/09/21 18:22	
EPA 6010D	Sodium	20.8	mg/L	1.0	09/09/21 18:22	
EPA 6010D	Calcium	73.6	mg/L	1.0	09/09/21 18:22	
EPA 6010D	Magnesium	36.8	mg/L	0.050	09/09/21 18:22	
EPA 6020B	Arsenic	0.0013J	mg/L	0.0050	09/09/21 21:04	
EPA 6020B	Barium	0.016	mg/L	0.0050	09/09/21 21:04	
EPA 6020B	Beryllium	0.0028	mg/L	0.00050	09/09/21 21:04	
EPA 6020B	Boron	6.1	mg/L	0.20	09/10/21 12:25	M1
EPA 6020B	Cadmium	0.0011	mg/L	0.00050	09/09/21 21:04	
EPA 6020B	Lithium	0.0070J	mg/L	0.030	09/09/21 21:04	
EPA 6020B	Selenium	0.060	mg/L	0.0050	09/09/21 21:04	
SM 2540C-2011	Total Dissolved Solids	562	mg/L	20.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	4.1	mg/L	1.0	09/06/21 10:59	
EPA 300.0 Rev 2.1 1993	Sulfate	328	mg/L	7.0	09/06/21 18:25	
92558259008	**YAMW-1**					
	Performed by	CUSTOMER			09/03/21 12:45	
	pH	5.97	Std. Units		09/03/21 12:45	
EPA 6010D	Potassium	6.5	mg/L	0.20	09/09/21 18:27	
EPA 6010D	Sodium	17.9	mg/L	1.0	09/09/21 18:27	
EPA 6010D	Calcium	16.8	mg/L	1.0	09/09/21 18:27	
EPA 6010D	Magnesium	13.1	mg/L	0.050	09/09/21 18:27	
EPA 6020B	Antimony	0.0024J	mg/L	0.0030	09/09/21 21:39	
EPA 6020B	Barium	0.075	mg/L	0.0050	09/09/21 21:39	
EPA 6020B	Beryllium	0.000095J	mg/L	0.00050	09/09/21 21:39	
EPA 6020B	Boron	0.18	mg/L	0.040	09/09/21 21:39	
EPA 6020B	Cadmium	0.00023J	mg/L	0.00050	09/09/21 21:39	
EPA 6020B	Cobalt	0.022	mg/L	0.0050	09/09/21 21:39	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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SUMMARY OF DETECTION

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558259008	**YAMW-1**					
EPA 6020B	Lithium	0.013J	mg/L	0.030	09/09/21 21:39	
EPA 6020B	Molybdenum	0.0014J	mg/L	0.010	09/09/21 21:39	
EPA 6020B	Selenium	0.0027J	mg/L	0.0050	09/09/21 21:39	
SM 2540C-2011	Total Dissolved Solids	219	mg/L	10.0	09/07/21 13:47	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	24.5	mg/L	5.0	09/09/21 21:02	
SM 2320B-2011	Alkalinity, Total as CaCO3	24.5	mg/L	5.0	09/09/21 21:02	
EPA 300.0 Rev 2.1 1993	Chloride	5.7	mg/L	1.0	09/08/21 07:42	
EPA 300.0 Rev 2.1 1993	Sulfate	94.7	mg/L	2.0	09/08/21 13:28	
92558259009	**PZ-35**					
	Performed by	CUSTOMER			09/03/21 12:45	
	pH	6.82	Std. Units		09/03/21 12:45	
EPA 6010D	Potassium	1.3	mg/L	0.20	09/09/21 18:31	
EPA 6010D	Sodium	12.3	mg/L	1.0	09/09/21 18:31	
EPA 6010D	Calcium	7.9	mg/L	1.0	09/09/21 18:31	
EPA 6010D	Magnesium	4.4	mg/L	0.050	09/09/21 18:31	
EPA 6020B	Barium	0.067	mg/L	0.0050	09/09/21 21:44	
EPA 6020B	Beryllium	0.00045J	mg/L	0.00050	09/09/21 21:44	
EPA 6020B	Boron	0.044	mg/L	0.040	09/09/21 21:44	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	09/09/21 21:44	
EPA 6020B	Selenium	0.0016J	mg/L	0.0050	09/09/21 21:44	
SM 2540C-2011	Total Dissolved Solids	128	mg/L	10.0	09/07/21 13:47	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	10.7	mg/L	5.0	09/09/21 21:08	
SM 2320B-2011	Alkalinity, Total as CaCO3	10.7	mg/L	5.0	09/09/21 21:08	
EPA 300.0 Rev 2.1 1993	Chloride	6.3	mg/L	1.0	09/08/21 07:57	
EPA 300.0 Rev 2.1 1993	Sulfate	38.7	mg/L	1.0	09/08/21 07:57	
92558259010	**YAMW-2**					
	Performed by	CUSTOMER			09/03/21 12:45	
	pH	6.67	Std. Units		09/03/21 12:45	
EPA 6010D	Calcium	1.4	mg/L	1.0	09/13/21 14:58	
EPA 6020B	Barium	0.0072	mg/L	0.0050	09/14/21 17:54	
EPA 6020B	Beryllium	0.000065J	mg/L	0.00050	09/14/21 17:54	
EPA 6020B	Boron	0.017J	mg/L	0.040	09/14/21 17:54	
EPA 6020B	Chromium	0.0030J	mg/L	0.0050	09/14/21 17:54	
EPA 6020B	Cobalt	0.00093J	mg/L	0.0050	09/14/21 17:54	
SM 2540C-2011	Total Dissolved Solids	60.0	mg/L	10.0	09/07/21 13:48	
EPA 300.0 Rev 2.1 1993	Chloride	2.6	mg/L	1.0	09/08/21 08:13	
EPA 300.0 Rev 2.1 1993	Sulfate	8.3	mg/L	1.0	09/08/21 08:13	
92558259011	**YGWC-49**					
	Performed by	CUSTOMER			09/03/21 12:45	
	pH	5.15	Std. Units		09/03/21 12:45	
EPA 6010D	Calcium	12.1	mg/L	1.0	09/13/21 15:17	
EPA 6020B	Barium	0.066	mg/L	0.0050	09/14/21 17:59	
EPA 6020B	Beryllium	0.00012J	mg/L	0.00050	09/14/21 17:59	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558259011	**YGWC-49**					
EPA 6020B	Chromium	0.0020J	mg/L	0.0050	09/14/21 17:59	
EPA 6020B	Lithium	0.0036J	mg/L	0.030	09/14/21 17:59	
EPA 6020B	Selenium	0.0066	mg/L	0.0050	09/14/21 17:59	
SM 2540C-2011	Total Dissolved Solids	163	mg/L	10.0	09/08/21 14:21	
EPA 300.0 Rev 2.1 1993	Chloride	4.4	mg/L	1.0	09/08/21 08:28	
EPA 300.0 Rev 2.1 1993	Sulfate	79.8	mg/L	1.0	09/08/21 08:28	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: AMA-EB-1 **Lab ID: 92558259001** Collected: 08/26/21 14:35 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 17:05	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 20:30	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:30	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 20:30	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 20:30	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/09/21 11:50	09/09/21 20:30	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 20:30	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:30	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 20:30	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 20:30	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 20:30	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 20:30	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 20:30	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 16:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/31/21 16:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/06/21 09:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 09:23	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 09:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: AMA-FB-1 **Lab ID: 92558259002** Collected: 08/25/21 18:00 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 17:09	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 20:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:36	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 20:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 20:36	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/09/21 11:50	09/09/21 20:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 20:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 20:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 20:36	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 20:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 20:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 20:36	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 16:50	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/31/21 16:25		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/06/21 09:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 09:39	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 09:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YAMW-4 **Lab ID: 92558259003** Collected: 08/25/21 17:50 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:23		
pH	**6.79**	Std. Units			1		08/30/21 10:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**6.1**	mg/L	0.20	0.15	1	09/09/21 11:55	09/09/21 17:14	7440-09-7	
Sodium	**24.9**	mg/L	1.0	0.58	1	09/09/21 11:55	09/09/21 17:14	7440-23-5	M1
Calcium	**11.0**	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 17:14	7440-70-2	
Magnesium	**36.1**	mg/L	0.050	0.012	1	09/09/21 11:55	09/09/21 17:14	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 20:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:41	7440-38-2	
Barium	**0.0037J**	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 20:41	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 20:41	7440-41-7	
Boron	**2.8**	mg/L	0.20	0.043	5	09/09/21 11:50	09/10/21 12:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 20:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:41	7440-47-3	
Cobalt	**0.00041J**	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 20:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 20:41	7439-92-1	
Lithium	**0.033**	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 20:41	7439-93-2	
Molybdenum	**0.0081J**	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 20:41	7439-98-7	
Selenium	**0.019**	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 20:41	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 16:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**332**	mg/L	10.0	10.0	1		08/31/21 16:25		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**61.4**	mg/L	5.0	5.0	1		09/03/21 20:11		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/03/21 20:11		
Alkalinity, Total as CaCO3	**61.4**	mg/L	5.0	5.0	1		09/03/21 20:11		
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		09/06/21 09:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 09:55	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YAMW-4 **Lab ID: 92558259003** Collected: 08/25/21 17:50 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**164**	mg/L	4.0	2.0	4		09/06/21 16:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YGWC-41 **Lab ID: 92558259004** Collected: 08/26/21 10:25 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:23		
pH	**6.77**	Std. Units			1		08/30/21 10:23		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**2.3**	mg/L	0.20	0.15	1	09/09/21 11:55	09/09/21 18:08	7440-09-7	
Sodium	**13.5**	mg/L	1.0	0.58	1	09/09/21 11:55	09/09/21 18:08	7440-23-5	
Calcium	**12.8**	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 18:08	7440-70-2	
Magnesium	**16.5**	mg/L	0.050	0.012	1	09/09/21 11:55	09/09/21 18:08	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 20:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:47	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 20:47	7440-39-3	
Beryllium	**0.0012**	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 20:47	7440-41-7	
Boron	**3.3**	mg/L	0.20	0.043	5	09/09/21 11:50	09/10/21 12:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 20:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 20:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 20:47	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 20:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 20:47	7439-98-7	
Selenium	**0.027**	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 20:47	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:03	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**225**	mg/L	10.0	10.0	1		08/31/21 16:51		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/07/21 15:18		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/07/21 15:18		
Alkalinity, Total as CaCO3	ND	mg/L	5.0	5.0	1		09/07/21 15:18		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.6**	mg/L	1.0	0.60	1		09/06/21 10:11	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 10:11	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YGWC-41 **Lab ID: 92558259004** Collected: 08/26/21 10:25 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**117**	mg/L	3.0	1.5	3		09/06/21 17:06	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: AMA-DUP-2 **Lab ID: 92558259005** Collected: 08/26/21 00:00 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**12.2**	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 18:12	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 20:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:53	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 20:53	7440-39-3	
Beryllium	**0.0012**	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 20:53	7440-41-7	
Boron	**3.3**	mg/L	0.20	0.043	5	09/09/21 11:50	09/10/21 12:13	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 20:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 20:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 20:53	7439-92-1	
Lithium	**0.0021J**	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 20:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 20:53	7439-98-7	
Selenium	**0.027**	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 20:53	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:06	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**232**	mg/L	10.0	10.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.6**	mg/L	1.0	0.60	1		09/06/21 10:27	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 10:27	16984-48-8	
Sulfate	**117**	mg/L	3.0	1.5	3		09/06/21 17:22	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YAMW-5 **Lab ID: 92558259006** Collected: 08/26/21 11:25 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:25		
pH	**5.35**	Std. Units			1		08/30/21 10:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**45.0**	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 18:17	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 20:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:58	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 20:58	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 20:58	7440-41-7	
Boron	**5.9**	mg/L	0.20	0.043	5	09/09/21 11:50	09/10/21 12:19	7440-42-8	
Cadmium	**0.00021J**	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 20:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 20:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 20:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 20:58	7439-92-1	
Lithium	**0.015J**	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 20:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 20:58	7439-98-7	
Selenium	**0.055**	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 20:58	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:08	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**570**	mg/L	20.0	20.0	1		08/31/21 16:51		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**13.0**	mg/L	5.0	5.0	1		09/07/21 15:23		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/07/21 15:23		
Alkalinity, Total as CaCO3	**13.0**	mg/L	5.0	5.0	1		09/07/21 15:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.9**	mg/L	1.0	0.60	1		09/06/21 10:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 10:43	16984-48-8	
Sulfate	**338**	mg/L	8.0	4.0	8		09/06/21 18:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YGWC-38 **Lab ID: 92558259007** Collected: 08/26/21 12:40 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:25		
pH	**4.54**	Std. Units			1		08/30/21 10:25		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**4.4**	mg/L	0.20	0.15	1	09/09/21 11:55	09/09/21 18:22	7440-09-7	
Sodium	**20.8**	mg/L	1.0	0.58	1	09/09/21 11:55	09/09/21 18:22	7440-23-5	
Calcium	**73.6**	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 18:22	7440-70-2	
Magnesium	**36.8**	mg/L	0.050	0.012	1	09/09/21 11:55	09/09/21 18:22	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 21:04	7440-36-0	
Arsenic	**0.0013J**	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 21:04	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 21:04	7440-39-3	
Beryllium	**0.0028**	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 21:04	7440-41-7	
Boron	**6.1**	mg/L	0.20	0.043	5	09/09/21 11:50	09/10/21 12:25	7440-42-8	M1
Cadmium	**0.0011**	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 21:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 21:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 21:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 21:04	7439-92-1	
Lithium	**0.0070J**	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 21:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 21:04	7439-98-7	
Selenium	**0.060**	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 21:04	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**562**	mg/L	20.0	20.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.1**	mg/L	1.0	0.60	1		09/06/21 10:59	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 10:59	16984-48-8	
Sulfate	**328**	mg/L	7.0	3.5	7		09/06/21 18:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YAMW-1 **Lab ID: 92558259008** Collected: 09/01/21 10:36 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 12:45		
pH	**5.97**	Std. Units			1		09/03/21 12:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**6.5**	mg/L	0.20	0.15	1	09/09/21 11:55	09/09/21 18:27	7440-09-7	
Sodium	**17.9**	mg/L	1.0	0.58	1	09/09/21 11:55	09/09/21 18:27	7440-23-5	
Calcium	**16.8**	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 18:27	7440-70-2	
Magnesium	**13.1**	mg/L	0.050	0.012	1	09/09/21 11:55	09/09/21 18:27	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0024J**	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 21:39	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 21:39	7440-38-2	
Barium	**0.075**	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 21:39	7440-39-3	
Beryllium	**0.000095J**	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 21:39	7440-41-7	
Boron	**0.18**	mg/L	0.040	0.0086	1	09/09/21 11:50	09/09/21 21:39	7440-42-8	
Cadmium	**0.00023J**	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 21:39	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 21:39	7440-47-3	
Cobalt	**0.022**	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 21:39	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 21:39	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 21:39	7439-93-2	
Molybdenum	**0.0014J**	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 21:39	7439-98-7	
Selenium	**0.0027J**	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 21:39	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:19	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**219**	mg/L	10.0	10.0	1		09/07/21 13:47		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**24.5**	mg/L	5.0	5.0	1		09/09/21 21:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/09/21 21:02		
Alkalinity, Total as CaCO3	**24.5**	mg/L	5.0	5.0	1		09/09/21 21:02		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.7**	mg/L	1.0	0.60	1		09/08/21 07:42	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/08/21 07:42	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YAMW-1 **Lab ID: 92558259008** Collected: 09/01/21 10:36 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**94.7**	mg/L	2.0	1.0	2		09/08/21 13:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: PZ-35 **Lab ID: 92558259009** Collected: 09/01/21 12:00 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 12:45		
pH	**6.82**	Std. Units			1		09/03/21 12:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**1.3**	mg/L	0.20	0.15	1	09/09/21 11:55	09/09/21 18:31	7440-09-7	
Sodium	**12.3**	mg/L	1.0	0.58	1	09/09/21 11:55	09/09/21 18:31	7440-23-5	
Calcium	**7.9**	mg/L	1.0	0.12	1	09/09/21 11:55	09/09/21 18:31	7440-70-2	
Magnesium	**4.4**	mg/L	0.050	0.012	1	09/09/21 11:55	09/09/21 18:31	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:50	09/09/21 21:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 21:44	7440-38-2	
Barium	**0.067**	mg/L	0.0050	0.00067	1	09/09/21 11:50	09/09/21 21:44	7440-39-3	
Beryllium	**0.00045J**	mg/L	0.00050	0.000054	1	09/09/21 11:50	09/09/21 21:44	7440-41-7	
Boron	**0.044**	mg/L	0.040	0.0086	1	09/09/21 11:50	09/09/21 21:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:50	09/09/21 21:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:50	09/09/21 21:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:50	09/09/21 21:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:50	09/09/21 21:44	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00073	1	09/09/21 11:50	09/09/21 21:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:50	09/09/21 21:44	7439-98-7	
Selenium	**0.0016J**	mg/L	0.0050	0.0014	1	09/09/21 11:50	09/09/21 21:44	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**128**	mg/L	10.0	10.0	1		09/07/21 13:47		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**10.7**	mg/L	5.0	5.0	1		09/09/21 21:08		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/09/21 21:08		
Alkalinity, Total as CaCO3	**10.7**	mg/L	5.0	5.0	1		09/09/21 21:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.3**	mg/L	1.0	0.60	1		09/08/21 07:57	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/08/21 07:57	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: PZ-35 **Lab ID: 92558259009** Collected: 09/01/21 12:00 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**38.7**	mg/L	1.0	0.50	1		09/08/21 07:57	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YAMW-2 **Lab ID: 92558259010** Collected: 09/01/21 13:50 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 12:45		
pH	**6.67**	Std. Units			1		09/03/21 12:45		
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	09/11/21 09:00	09/13/21 14:58	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 17:54	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 17:54	7440-38-2	
Barium	**0.0072**	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 17:54	7440-39-3	
Beryllium	**0.000065J**	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 17:54	7440-41-7	
Boron	**0.017J**	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 17:54	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 17:54	7440-43-9	
Chromium	**0.0030J**	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 17:54	7440-47-3	
Cobalt	**0.00093J**	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 17:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 17:54	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 17:54	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 17:54	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 17:54	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**60.0**	mg/L	10.0	10.0	1		09/07/21 13:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.6**	mg/L	1.0	0.60	1		09/08/21 08:13	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/08/21 08:13	16984-48-8	
Sulfate	**8.3**	mg/L	1.0	0.50	1		09/08/21 08:13	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6
Pace Project No.: 92558259

Sample: YGWC-49 **Lab ID: 92558259011** Collected: 09/01/21 15:30 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 12:45		
pH	**5.15**	Std. Units			1		09/03/21 12:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**12.1**	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 15:17	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 17:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 17:59	7440-38-2	
Barium	**0.066**	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 17:59	7440-39-3	
Beryllium	**0.00012J**	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 17:59	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 17:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 17:59	7440-43-9	
Chromium	**0.0020J**	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 17:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 17:59	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 17:59	7439-92-1	
Lithium	**0.0036J**	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 17:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 17:59	7439-98-7	
Selenium	**0.0066**	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 17:59	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/13/21 13:15	09/13/21 17:27	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**163**	mg/L	10.0	10.0	1		09/08/21 14:21		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.4**	mg/L	1.0	0.60	1		09/08/21 08:28	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/08/21 08:28	16984-48-8	
Sulfate	**79.8**	mg/L	1.0	0.50	1		09/08/21 08:28	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645863
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007, 92558259008, 92558259009

METHOD BLANK: 3387833 Matrix: Water
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007, 92558259008, 92558259009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/09/21 16:55	
Magnesium	mg/L	ND	0.050	0.012	09/09/21 16:55	
Potassium	mg/L	ND	0.20	0.15	09/09/21 16:55	
Sodium	mg/L	ND	1.0	0.58	09/09/21 16:55	

LABORATORY CONTROL SAMPLE: 3387834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.1	105	80-120	
Sodium	mg/L	1	1.1	108	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387835 3387836

Parameter	Units	92558259003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	11.0	1	1	12.0	12.1	103	112	75-125	1	20	
Magnesium	mg/L	36.1	1	1	37.0	36.6	92	43	75-125	1	20	M1
Potassium	mg/L	6.1	1	1	7.1	7.0	102	90	75-125	2	20	
Sodium	mg/L	24.9	1	1	25.9	25.3	101	40	75-125	2	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 646610
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259010, 92558259011

METHOD BLANK: 3391819 Matrix: Water
Associated Lab Samples: 92558259010, 92558259011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/21 14:48	

LABORATORY CONTROL SAMPLE: 3391820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391821 3391822

Parameter	Units	92558259010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1.4	1	1	2.5	2.5	106	109	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645868
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007, 92558259008, 92558259009

METHOD BLANK: 3387883 Matrix: Water
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007, 92558259008, 92558259009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/09/21 20:18	
Arsenic	mg/L	ND	0.0050	0.0011	09/09/21 20:18	
Barium	mg/L	ND	0.0050	0.00067	09/09/21 20:18	
Beryllium	mg/L	ND	0.00050	0.000054	09/09/21 20:18	
Boron	mg/L	ND	0.040	0.0086	09/09/21 20:18	
Cadmium	mg/L	ND	0.00050	0.00011	09/09/21 20:18	
Chromium	mg/L	ND	0.0050	0.0011	09/09/21 20:18	
Cobalt	mg/L	ND	0.0050	0.00039	09/09/21 20:18	
Lead	mg/L	ND	0.0010	0.00089	09/09/21 20:18	
Lithium	mg/L	ND	0.030	0.00073	09/09/21 20:18	
Molybdenum	mg/L	ND	0.010	0.00074	09/09/21 20:18	
Selenium	mg/L	ND	0.0050	0.0014	09/09/21 20:18	

LABORATORY CONTROL SAMPLE: 3387884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.096	96	80-120	
Barium	mg/L	0.1	0.10	100	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	100	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.096	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387885 3387886

Parameter	Units	92558259007 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	0.10	106	103	75-125	2	20	
Arsenic	mg/L	0.0013J	0.1	0.1	0.098	0.098	97	97	75-125	0	20	
Barium	mg/L	0.016	0.1	0.1	0.12	0.11	100	97	75-125	2	20	

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387885 3387886

Parameter	Units	92558259007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	0.0028	0.1	0.1	0.095	0.096	93	93	75-125	1	20	
Boron	mg/L	6.1	1	1	7.4	7.1	131	100	75-125	4	20	M1
Cadmium	mg/L	0.0011	0.1	0.1	0.097	0.097	96	96	75-125	0	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	103	102	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.096	0.096	96	96	75-125	0	20	
Lead	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	2	20	
Lithium	mg/L	0.0070J	0.1	0.1	0.10	0.10	95	96	75-125	0	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	110	106	75-125	4	20	
Selenium	mg/L	0.060	0.1	0.1	0.15	0.16	92	95	75-125	2	20	

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 646612
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259010, 92558259011

METHOD BLANK: 3391827 Matrix: Water
Associated Lab Samples: 92558259010, 92558259011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/14/21 17:25	
Arsenic	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Barium	mg/L	ND	0.0050	0.00067	09/14/21 17:25	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/21 17:25	
Boron	mg/L	ND	0.040	0.0086	09/14/21 17:25	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/21 17:25	
Chromium	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/21 17:25	
Lead	mg/L	ND	0.0010	0.00089	09/14/21 17:25	
Lithium	mg/L	ND	0.030	0.00073	09/14/21 17:25	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/21 17:25	
Selenium	mg/L	ND	0.0050	0.0014	09/14/21 17:25	

LABORATORY CONTROL SAMPLE: 3391828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391829 3391830

Parameter	Units	92559417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	1	20	
Barium	mg/L	0.028	0.1	0.1	0.13	0.13	98	99	75-125	0	20	
Beryllium	mg/L	0.00016J	0.1	0.1	0.097	0.099	97	98	75-125	2	20	

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391829 3391830

Parameter	Units	92559417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	1.2	1	1	2.3	2.5	92	116	75-125	10	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Lithium	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	102	75-125	4	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Selenium	mg/L	0.021	0.1	0.1	0.12	0.12	100	101	75-125	1	20	

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 646736 Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007, 92558259008, 92558259009, 92558259010, 92558259011

METHOD BLANK: 3392335 Matrix: Water
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007, 92558259008, 92558259009, 92558259010, 92558259011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/13/21 16:18	

LABORATORY CONTROL SAMPLE: 3392336

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3392337 3392338

Parameter	Units	92558259003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0026	96	102	75-125	6	20	

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 644073
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259002, 92558259003

METHOD BLANK: 3379366 Matrix: Water
Associated Lab Samples: 92558259002, 92558259003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:23	

LABORATORY CONTROL SAMPLE: 3379367

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	408	102	90-111	

SAMPLE DUPLICATE: 3379368

Parameter	Units	92557720003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	822	870	6	10	

SAMPLE DUPLICATE: 3379369

Parameter	Units	92555948054 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0	ND		10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 644074 — Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 — Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259001, 92558259004, 92558259005, 92558259006, 92558259007

METHOD BLANK: 3379370 — Matrix: Water
Associated Lab Samples: 92558259001, 92558259004, 92558259005, 92558259006, 92558259007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:50	

LABORATORY CONTROL SAMPLE: 3379371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	90-111	

SAMPLE DUPLICATE: 3379372

Parameter	Units	92558254005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	123	128	4	10	

SAMPLE DUPLICATE: 3379373

Parameter	Units	92558251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	150	151	1	10	

SAMPLE DUPLICATE: 3380417

Parameter	Units	92555945014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	396	414	4	10	H1

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645434 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259008, 92558259009, 92558259010

METHOD BLANK: 3385639 Matrix: Water
Associated Lab Samples: 92558259008, 92558259009, 92558259010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/07/21 13:45	

LABORATORY CONTROL SAMPLE: 3385640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	393	98	90-111	

SAMPLE DUPLICATE: 3385641

Parameter	Units	92558572001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	197	201	2	10	

SAMPLE DUPLICATE: 3385642

Parameter	Units	92558720005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	39.0	54.0	32	10	R1

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645665
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558259011

METHOD BLANK: 3386951 Matrix: Water
Associated Lab Samples: 92558259011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/08/21 14:20	

LABORATORY CONTROL SAMPLE: 3386952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	391	98	90-111	

SAMPLE DUPLICATE: 3386953

Parameter	Units	92558259011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	163	174	7	10	

SAMPLE DUPLICATE: 3386954

Parameter	Units	92559417002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	546	557	2	10	

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645064
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558259003

METHOD BLANK: 3384059 Matrix: Water
Associated Lab Samples: 92558259003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/03/21 17:19	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/03/21 17:19	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/03/21 17:19	

LABORATORY CONTROL SAMPLE: 3384060

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.4	107	80-120	

LABORATORY CONTROL SAMPLE: 3384061

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.5	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3384062 3384063

Parameter	Units	92555948049 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	128	50	50	176	176	97	97	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3384064 3384065

Parameter	Units	92557720004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	13.9	50	50	67.2	66.7	107	105	80-120	1	25	

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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645417
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558259004, 92558259006

METHOD BLANK: 3385562 Matrix: Water
Associated Lab Samples: 92558259004, 92558259006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/07/21 11:59	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/07/21 11:59	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/07/21 11:59	

LABORATORY CONTROL SAMPLE: 3385563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	48.1	96	80-120	

LABORATORY CONTROL SAMPLE: 3385564

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.7	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385565 3385566

Parameter	Units	92558347031 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	532	50	50	568	560	73	55	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385567 3385568

Parameter	Units	92559263002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	71.2	50	50	121	121	99	99	80-120	0	25	

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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645735
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558259008, 92558259009

METHOD BLANK: 3387088 Matrix: Water
Associated Lab Samples: 92558259008, 92558259009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/09/21 17:40	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/09/21 17:40	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/09/21 17:40	

LABORATORY CONTROL SAMPLE: 3387089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.2	102	80-120	

LABORATORY CONTROL SAMPLE: 3387090

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.0	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387091 3387092

Parameter	Units	92558720005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	108	50	50	156	158	97	101	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387093 3387094

Parameter	Units	92558974001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	24.5	50	50	74.9	74.6	101	100	80-120	0	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645269
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007

METHOD BLANK: 3385184 Matrix: Water
Associated Lab Samples: 92558259001, 92558259002, 92558259003, 92558259004, 92558259005, 92558259006, 92558259007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/06/21 06:59	
Fluoride	mg/L	ND	0.10	0.050	09/06/21 06:59	
Sulfate	mg/L	ND	1.0	0.50	09/06/21 06:59	

LABORATORY CONTROL SAMPLE: 3385185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	51.0	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385186 3385187

Parameter	Units	92558254009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.8	50	50	68.7	69.4	132	133	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3	3.3	130	130	90-110	0	10	M1
Sulfate	mg/L	ND	50	50	69.3	69.9	138	140	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385188 3385189

Parameter	Units	92558560001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.8	50	50	67.3	67.5	107	107	90-110	0	10	
Fluoride	mg/L	0.29	2.5	2.5	3.0	3.0	110	109	90-110	1	10	
Sulfate	mg/L	27.9	50	50	82.7	82.7	110	110	90-110	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6
Pace Project No.: 92558259

QC Batch: 645412
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558259008, 92558259009, 92558259010, 92558259011

METHOD BLANK: 3385548 Matrix: Water
Associated Lab Samples: 92558259008, 92558259009, 92558259010, 92558259011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/08/21 05:04	
Fluoride	mg/L	ND	0.10	0.050	09/08/21 05:04	
Sulfate	mg/L	ND	1.0	0.50	09/08/21 05:04	

LABORATORY CONTROL SAMPLE: 3385549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385550 3385551

Parameter	Units	92559210006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	57.8	55.9	110	106	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.7	109	105	90-110	3	10	
Sulfate	mg/L	ND	50	50	54.9	54.2	108	107	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385552 3385553

Parameter	Units	92559417003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.3	50	50	57.3	56.1	108	106	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	105	102	90-110	3	10	
Sulfate	mg/L	1.3	50	50	56.2	55.0	110	107	90-110	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES AMA-R6
Pace Project No.: 92558259

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92558259003	**YAMW-4**				
92558259004	**YGWC-41**				
92558259006	**YAMW-5**				
92558259007	**YGWC-38**				
92558259008	**YAMW-1**				
92558259009	**PZ-35**				
92558259010	**YAMW-2**				
92558259011	**YGWC-49**				
92558259001	**AMA-EB-1**	EPA 3010A	645863	EPA 6010D	646176
92558259002	**AMA-FB-1**	EPA 3010A	645863	EPA 6010D	646176
92558259003	**YAMW-4**	EPA 3010A	645863	EPA 6010D	646176
92558259004	**YGWC-41**	EPA 3010A	645863	EPA 6010D	646176
92558259005	**AMA-DUP-2**	EPA 3010A	645863	EPA 6010D	646176
92558259006	**YAMW-5**	EPA 3010A	645863	EPA 6010D	646176
92558259007	**YGWC-38**	EPA 3010A	645863	EPA 6010D	646176
92558259008	**YAMW-1**	EPA 3010A	645863	EPA 6010D	646176
92558259009	**PZ-35**	EPA 3010A	645863	EPA 6010D	646176
92558259010	**YAMW-2**	EPA 3010A	646610	EPA 6010D	646635
92558259011	**YGWC-49**	EPA 3010A	646610	EPA 6010D	646635
92558259001	**AMA-EB-1**	EPA 3005A	645868	EPA 6020B	646190
92558259002	**AMA-FB-1**	EPA 3005A	645868	EPA 6020B	646190
92558259003	**YAMW-4**	EPA 3005A	645868	EPA 6020B	646190
92558259004	**YGWC-41**	EPA 3005A	645868	EPA 6020B	646190
92558259005	**AMA-DUP-2**	EPA 3005A	645868	EPA 6020B	646190
92558259006	**YAMW-5**	EPA 3005A	645868	EPA 6020B	646190
92558259007	**YGWC-38**	EPA 3005A	645868	EPA 6020B	646190
92558259008	**YAMW-1**	EPA 3005A	645868	EPA 6020B	646190
92558259009	**PZ-35**	EPA 3005A	645868	EPA 6020B	646190
92558259010	**YAMW-2**	EPA 3005A	646612	EPA 6020B	646637
92558259011	**YGWC-49**	EPA 3005A	646612	EPA 6020B	646637
92558259001	**AMA-EB-1**	EPA 7470A	646736	EPA 7470A	646808
92558259002	**AMA-FB-1**	EPA 7470A	646736	EPA 7470A	646808
92558259003	**YAMW-4**	EPA 7470A	646736	EPA 7470A	646808
92558259004	**YGWC-41**	EPA 7470A	646736	EPA 7470A	646808
92558259005	**AMA-DUP-2**	EPA 7470A	646736	EPA 7470A	646808
92558259006	**YAMW-5**	EPA 7470A	646736	EPA 7470A	646808
92558259007	**YGWC-38**	EPA 7470A	646736	EPA 7470A	646808
92558259008	**YAMW-1**	EPA 7470A	646736	EPA 7470A	646808
92558259009	**PZ-35**	EPA 7470A	646736	EPA 7470A	646808
92558259010	**YAMW-2**	EPA 7470A	646736	EPA 7470A	646808
92558259011	**YGWC-49**	EPA 7470A	646736	EPA 7470A	646808
92558259001	**AMA-EB-1**	SM 2540C-2011	644074		
92558259002	**AMA-FB-1**	SM 2540C-2011	644073		
92558259003	**YAMW-4**	SM 2540C-2011	644073		
92558259004	**YGWC-41**	SM 2540C-2011	644074		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA-R6
Pace Project No.: 92558259

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92558259005	**AMA-DUP-2**	SM 2540C-2011	644074		
92558259006	**YAMW-5**	SM 2540C-2011	644074		
92558259007	**YGWC-38**	SM 2540C-2011	644074		
92558259008	**YAMW-1**	SM 2540C-2011	645434		
92558259009	**PZ-35**	SM 2540C-2011	645434		
92558259010	**YAMW-2**	SM 2540C-2011	645434		
92558259011	**YGWC-49**	SM 2540C-2011	645665		
92558259003	**YAMW-4**	SM 2320B-2011	645064		
92558259004	**YGWC-41**	SM 2320B-2011	645417		
92558259006	**YAMW-5**	SM 2320B-2011	645417		
92558259008	**YAMW-1**	SM 2320B-2011	645735		
92558259009	**PZ-35**	SM 2320B-2011	645735		
92558259001	**AMA-EB-1**	EPA 300.0 Rev 2.1 1993	645269		
92558259002	**AMA-FB-1**	EPA 300.0 Rev 2.1 1993	645269		
92558259003	**YAMW-4**	EPA 300.0 Rev 2.1 1993	645269		
92558259004	**YGWC-41**	EPA 300.0 Rev 2.1 1993	645269		
92558259005	**AMA-DUP-2**	EPA 300.0 Rev 2.1 1993	645269		
92558259006	**YAMW-5**	EPA 300.0 Rev 2.1 1993	645269		
92558259007	**YGWC-38**	EPA 300.0 Rev 2.1 1993	645269		
92558259008	**YAMW-1**	EPA 300.0 Rev 2.1 1993	645412		
92558259009	**PZ-35**	EPA 300.0 Rev 2.1 1993	645412		
92558259010	**YAMW-2**	EPA 300.0 Rev 2.1 1993	645412		
92558259011	**YGWC-49**	EPA 300.0 Rev 2.1 1993	645412		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-C3-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558259

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION: YAMW-5: III/IV metals, no TT

Person contacted: Geoffrey Gay Date/Time: 8/30/21 10:27

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project #

WO# : 92558259

PM: NMG Due Date: 09/13/21

CLIENT: GA-GA Power

Item#	BP4N-125 mL Plastic Unpreserved (N/A) (Cl-)	BP2U-250 mL Plastic Unpreserved (N/A)	BP3U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (SO4)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3S-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3A-250 mL Amber H2SO4 (pH < 2)	AG3A(DG9A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9H-40 mL VOA H2SO4 (N/A)	VOAS (5 vials per kit)-5035 kit (N/A)	VOA (3 vials per kit)-Methanol kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - kit)	SP5T-250 mL Sterile Plastic (N/A - kit)	BP1T-250 mL Plastic (NH4)2SO4 (0.1-0.7)	AG0A-125 mL Amber Unpreserved vials (N/A)	VG4U-40 mL Septavial vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																		2			
2		1	1			1																		2			
3		1	1			1																		2			
4		1	1			1																		2			
5		1	1			1																		2			
6		1	1			1																		2			
7		1	1			1																		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 DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : Of

Section A — Required Client Information:

Company: Georgia Power
Address: Atlanta, GA
Email To: SCS and Arcadis Contacts
Phone: Fax:
Requested Due Date: 10 Day

Section B — Required Project Information:

Report To: SCS Contacts
Copy To: Arcadis Contacts
Purchase Order #:
Project Name: Yates AMA (N)
Project Number:

Section C — Invoice Information:

Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring/Nicole D'Olier
Pace Profile #: 10840

Regulatory Agency: GCR
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	Matrix Codes (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	300.0 Anions	Arsenic Suite 300.0	App III Metals	App IV Metals (Sb Tl)	Radium 226/228	Alkalinity	Calcium (Ca, Hg, Co)	Residual Chlorine (Y/N)	
1	[illegible]	WT	G	8/26/21	1450					2		3							x	x	x	x	x			-
2	[illegible]	WT	G																x	x	x	x	x			-
3	AMA-(N)-1	WT	G	8/25/21	1100					2		3							x	x	x	x	x			-
4	[illegible]	WT	G																x	x	x	x	x			-
5	[illegible]	WT	G																x	x	x	x	x	x	x	
6	[illegible]	WT	G																x	x	x	x	x			
7	[illegible]	WT	G		-														x	x	x	x	x			
8	[illegible]	WT	G																x	x	x	x	x	x	x	
9	[illegible]	WT	G																x	x	x	x	x			
10	[illegible] YAMW-4	WT	G	8/25/21	1530					2		3							x	x	x	x	x	x	x	6.79
11	YDMW-01	WT	G	8/26/21	1005					2		3							x	x	x	x	x	x	x	6.77
12	AMA-DUP-2	WT	G	8/24/21	-					2		3							x	x	x	x	x			-

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Arsenic Suite 300.0 (Cl, F, Sulfate)	[signature]	8/26/21	1410	[signature]	8/26	1410	
App III Metals: Boron B200.8; Ca-6010D	[signature]	8/26/21	1640	[signature]	8/26/21	1640	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Pyrkowicz

SIGNATURE of SAMPLER: [signature]

DATE Signed: 8.26.21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 2 Of 2

Section A – Required Client Information		Section B – Required Project Information		Section C – Invoice Information	
Company:	Arcadis (GA Power)	Report To:	Becky Steever	Attention:	
Address:	2839 Paces Ferry Rd	Copy To:		Company Name:	
Suite 900, Atlanta, GA 30339				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates R6/A6A	Pace Project Manager:	[illegible]@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	10840

Regulatory Agency:

State / Location: GA

Matrix codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

SAMPLE ID: One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

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	TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWC-41	WT																			x					
14	YGWC-42	WT																			x					
15	YGWC-43	WT																			x					
16	YAMW-5			8/26	1125				5									X	X				X	X		Ph: 5.35
17	YGWC-38			8/26	1240				5									X	X		X		X			Ph: 4.54
18																										
19																										
20																										
21																										
22																										
23																										
24																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	8/27		[signature]	8/27/[illegible]	1648	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature]

DATE Signed: 8/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92558259**

PM: NMG Due Date: 09/13/21
CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/2/21 KAM

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) ±0.1

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Project # **WO# : 92558259**

PM: NMG Due Date: 08/13/21

CLIENT: GA-GA Power

Item	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1N	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			✓ 1																		✓ 2				
2		1	1			✓ 1																		✓ 2				
3		1	1			✓ 1																		✓ 2				
4		1	1			✓ 1																		✓ 2				
5		1	1			✓ 1																		✓ 2				
6		1	1			✓ 1																		✓ 2				
7		1	1			✓ 1																		✓ 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 DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 2 Of 2

Section A Required Client Information:
Company: Arcadis (GA Power)
Address: 3939 Peters Ferry Rd
Suite 300, Atlanta, GA 30339
Email:
Phone: Fax:
Requested Due Date:

Section B Required Project Information:
Report To: Becky Stetzer
Copy To:
Purchase Order #:
Project Name: Yates 8B / AMA
Project #:

Section C Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10840

Regulatory Agency:
State / Location:
QA

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: TDS	Cl, F, SO4	Acidity Metals	Alkalinity + Colors	RAD 226/228	Alkalinity	Residual Chlorine (Y/N)	Remarks
13	[illegible]	WT																			X				
14	[illegible]	WT																			X				
15	[illegible]	WT																			X				
16	YAMW-1			9/1/21	1034				5	X		X						X	X	X	X	X	X		5.97 pH
17	P2-35			9/1/21	1240				5	X		X						X	X	X	X	X	X		6.32 pH
18	YAMW-2			9/1/21	1455				5	X		X						X	X	X	X				6.67 pH
19	YGWC-49			9/1/21	1553				5	X		X						X	X	X	X				5.15 pH
20																									
21																									
22																									
23																									
24																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	9/2/21	1530	[signature] Intrado	9/2/21	1530	
	[signature]	9/2/21	1702	[signature]	9/2/21	1702	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Mary Chest
SIGNATURE of SAMPLER: [signature] DATE Signed: 9/2/21

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 29, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES AMA
Pace Project No.: 92558254

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 27, 2021 and September 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tyler Forney for
Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES AMA
Pace Project No.: 92558254

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES AMA
Pace Project No.: 92558254

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92558254010	**AMA-EB-1**	Water	08/26/21 16:00	08/27/21 16:40
92558254011	**AMA-EB-2**	Water	08/27/21 13:40	08/27/21 16:40
92558254012	**AMA-DUP-1**	Water	09/01/21 00:00	09/02/21 17:02
92558254013	**YGWC-24SA**	Water	09/01/21 10:25	09/02/21 17:02
92558254015	**YGWC-36A**	Water	09/03/21 14:00	09/03/21 17:30
92558254016	**YAMW-3**	Water	09/03/21 11:05	09/03/21 17:30
92558254017	**PZ-37D**	Water	09/03/21 12:20	09/03/21 17:30

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA
Pace Project No.: 92558254

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92558254010	**AMA-EB-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254011	**AMA-EB-2**	EPA 6010D	DRB	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254012	**AMA-DUP-1**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254013	**YGWC-24SA**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254015	**YGWC-36A**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254016	**YAMW-3**	EPA 6010D	DRB	4
		SM 2320B-2011	ECH	3
92558254017	**PZ-37D**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA
Pace Project No.: 92558254

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558254012	**AMA-DUP-1**					
EPA 6010D	Calcium	2.2	mg/L	1.0	09/15/21 19:05	
EPA 6020B	Barium	0.024	mg/L	0.0050	09/16/21 11:10	
EPA 6020B	Beryllium	0.00015J	mg/L	0.00050	09/16/21 11:10	
SM 2540C-2011	Total Dissolved Solids	81.0	mg/L	10.0	09/07/21 13:47	
EPA 300.0 Rev 2.1 1993	Chloride	8.9	mg/L	1.0	09/08/21 06:55	
92558254013	**YGWC-24SA**					
	Performed by	CUSTOMER			09/03/21 11:11	
	pH	5.22	Std. Units		09/03/21 11:11	
EPA 6010D	Calcium	2.3	mg/L	1.0	09/15/21 19:10	
EPA 6020B	Barium	0.025	mg/L	0.0050	09/16/21 11:16	
EPA 6020B	Beryllium	0.00014J	mg/L	0.00050	09/16/21 11:16	
SM 2540C-2011	Total Dissolved Solids	96.0	mg/L	10.0	09/07/21 13:47	
EPA 300.0 Rev 2.1 1993	Chloride	8.9	mg/L	1.0	09/08/21 07:10	
92558254015	**YGWC-36A**					
	Performed by	CUSTOMER			09/03/21 17:52	
	pH	5.06	Std. Units		09/03/21 17:52	
EPA 6010D	Potassium	0.79	mg/L	0.20	09/15/21 19:19	
EPA 6010D	Sodium	11.2	mg/L	1.0	09/15/21 19:19	
EPA 6010D	Calcium	4.1	mg/L	1.0	09/15/21 19:19	
EPA 6010D	Magnesium	1.6	mg/L	0.050	09/15/21 19:19	
EPA 6020B	Antimony	0.0016J	mg/L	0.0030	09/16/21 11:27	
EPA 6020B	Barium	0.038	mg/L	0.0050	09/16/21 11:27	
EPA 6020B	Beryllium	0.00035J	mg/L	0.00050	09/16/21 11:27	
EPA 6020B	Boron	0.012J	mg/L	0.040	09/16/21 11:27	
EPA 6020B	Lithium	0.00086J	mg/L	0.030	09/16/21 11:27	
SM 2540C-2011	Total Dissolved Solids	89.0	mg/L	10.0	09/08/21 14:23	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	10.9	mg/L	5.0	09/13/21 18:04	
SM 2320B-2011	Alkalinity, Total as CaCO3	10.9	mg/L	5.0	09/13/21 18:04	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	09/10/21 09:34	
EPA 300.0 Rev 2.1 1993	Sulfate	13.8	mg/L	1.0	09/10/21 09:34	
92558254016	**YAMW-3**					
	Performed by	CUSTOMER			09/03/21 17:53	
	pH	5.74	Std. Units		09/03/21 17:53	
EPA 6010D	Potassium	18.5	mg/L	0.20	09/15/21 19:24	
EPA 6010D	Sodium	73.0	mg/L	1.0	09/15/21 19:24	
EPA 6010D	Calcium	42.5	mg/L	1.0	09/15/21 19:24	
EPA 6010D	Magnesium	74.1	mg/L	0.050	09/15/21 19:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	66.1	mg/L	5.0	09/13/21 18:09	
SM 2320B-2011	Alkalinity, Total as CaCO3	66.1	mg/L	5.0	09/13/21 18:09	
92558254017	**PZ-37D**					
	Performed by	CUSTOMER			09/03/21 17:53	
	pH	7.44	Std. Units		09/03/21 17:53	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA
Pace Project No.: 92558254

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558254017	**PZ-37D**					
EPA 6010D	Potassium	5.6	mg/L	0.20	09/15/21 19:29	
EPA 6010D	Sodium	27.7	mg/L	1.0	09/15/21 19:29	
EPA 6010D	Calcium	64.0	mg/L	1.0	09/15/21 19:29	
EPA 6010D	Magnesium	12.6	mg/L	0.050	09/15/21 19:29	
EPA 6020B	Barium	0.015	mg/L	0.0050	09/16/21 16:16	
EPA 6020B	Boron	1.6	mg/L	0.040	09/16/21 16:16	
EPA 6020B	Lithium	0.013J	mg/L	0.030	09/16/21 16:16	
EPA 6020B	Molybdenum	0.0018J	mg/L	0.010	09/16/21 16:16	
SM 2540C-2011	Total Dissolved Solids	374	mg/L	10.0	09/08/21 14:23	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	112	mg/L	5.0	09/16/21 16:15	
SM 2320B-2011	Alkalinity, Total as CaCO3	112	mg/L	5.0	09/16/21 16:15	
EPA 300.0 Rev 2.1 1993	Chloride	7.1	mg/L	1.0	09/10/21 09:50	
EPA 300.0 Rev 2.1 1993	Fluoride	0.15	mg/L	0.10	09/10/21 09:50	
EPA 300.0 Rev 2.1 1993	Sulfate	153	mg/L	3.0	09/10/21 15:23	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: AMA-EB-1 **Lab ID: 92558254010** Collected: 08/26/21 16:00 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:56	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:58	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:58	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:58	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:58	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:58	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:58	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:58	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:58	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:58	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:58	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:58	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:58	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/15/21 13:00	09/16/21 10:58	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:50	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/31/21 16:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/06/21 08:51	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 08:51	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 08:51	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: AMA-EB-2 **Lab ID: 92558254011** Collected: 08/27/21 13:40 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:00	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 11:04	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:04	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 11:04	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 11:04	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 11:04	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 11:04	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:04	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 11:04	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 11:04	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 11:04	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 11:04	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 11:04	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	09/15/21 13:00	09/16/21 11:04	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:53	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/31/21 16:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/06/21 09:07	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 09:07	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 09:07	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: AMA-DUP-1 **Lab ID: 92558254012** Collected: 09/01/21 00:00 Received: 09/02/21 17:02 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	09/15/21 11:37	09/15/21 19:05	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 11:10	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:10	7440-38-2	
Barium	**0.024**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 11:10	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 11:10	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 11:10	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 11:10	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:10	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 11:10	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 11:10	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 11:10	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 11:10	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 11:10	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:55	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**81.0**	mg/L	10.0	10.0	1		09/07/21 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.9**	mg/L	1.0	0.60	1		09/08/21 06:55	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/08/21 06:55	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/08/21 06:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: YGWC-24SA **Lab ID: 92558254013** Collected: 09/01/21 10:25 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 11:11		
pH	**5.22**	Std. Units			1		09/03/21 11:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.3**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:10	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	0.00078	1	09/15/21 13:00	09/16/21 11:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:16	7440-38-2	
Barium	**0.025**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 11:16	7440-39-3	
Beryllium	**0.00014J**	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 11:16	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 11:16	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 11:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 11:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 11:16	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 11:16	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 11:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 11:16	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:58	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**96.0**	mg/L	10.0	10.0	1		09/07/21 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.9**	mg/L	1.0	0.60	1		09/08/21 07:10	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/08/21 07:10	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/08/21 07:10	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: YGWC-36A **Lab ID: 92558254015** Collected: 09/03/21 14:00 Received: 09/03/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 17:52		
pH	**5.06**	Std. Units			1		09/03/21 17:52		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**0.79**	mg/L	0.20	0.15	1	09/15/21 11:37	09/15/21 19:19	7440-09-7	
Sodium	**11.2**	mg/L	1.0	0.58	1	09/15/21 11:37	09/15/21 19:19	7440-23-5	
Calcium	**4.1**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:19	7440-70-2	
Magnesium	**1.6**	mg/L	0.050	0.012	1	09/15/21 11:37	09/15/21 19:19	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	**0.0016J**	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 11:27	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:27	7440-38-2	
Barium	**0.038**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 11:27	7440-39-3	
Beryllium	**0.00035J**	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 11:27	7440-41-7	
Boron	**0.012J**	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 11:27	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 11:27	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:27	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 11:27	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 11:27	7439-92-1	
Lithium	**0.00086J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 11:27	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 11:27	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 11:27	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 15:08	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**89.0**	mg/L	10.0	10.0	1		09/08/21 14:23		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**10.9**	mg/L	5.0	5.0	1		09/13/21 18:04		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/21 18:04		
Alkalinity, Total as CaCO3	**10.9**	mg/L	5.0	5.0	1		09/13/21 18:04		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.0**	mg/L	1.0	0.60	1		09/10/21 09:34	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/10/21 09:34	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: YGWC-36A **Lab ID: 92558254015** Collected: 09/03/21 14:00 Received: 09/03/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**13.8**	mg/L	1.0	0.50	1		09/10/21 09:34	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: YAMW-3 **Lab ID: 92558254016** Collected: 09/03/21 11:05 Received: 09/03/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 17:53		
pH	**5.74**	Std. Units			1		09/03/21 17:53		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**18.5**	mg/L	0.20	0.15	1	09/15/21 11:37	09/15/21 19:24	7440-09-7	
Sodium	**73.0**	mg/L	1.0	0.58	1	09/15/21 11:37	09/15/21 19:24	7440-23-5	
Calcium	**42.5**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:24	7440-70-2	
Magnesium	**74.1**	mg/L	0.050	0.012	1	09/15/21 11:37	09/15/21 19:24	7439-95-4	
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**66.1**	mg/L	5.0	5.0	1		09/13/21 18:09		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/21 18:09		
Alkalinity, Total as CaCO3	**66.1**	mg/L	5.0	5.0	1		09/13/21 18:09		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: PZ-37D **Lab ID: 92558254017** Collected: 09/03/21 12:20 Received: 09/03/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 17:53		
pH	**7.44**	Std. Units			1		09/03/21 17:53		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**5.6**	mg/L	0.20	0.15	1	09/15/21 11:37	09/15/21 19:29	7440-09-7	
Sodium	**27.7**	mg/L	1.0	0.58	1	09/15/21 11:37	09/15/21 19:29	7440-23-5	
Calcium	**64.0**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:29	7440-70-2	
Magnesium	**12.6**	mg/L	0.050	0.012	1	09/15/21 11:37	09/15/21 19:29	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 16:16	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 16:16	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 16:16	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 16:16	7440-41-7	
Boron	**1.6**	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 16:16	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 16:16	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 16:16	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 16:16	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 16:16	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 16:16	7439-93-2	
Molybdenum	**0.0018J**	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 16:16	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 16:16	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 10:54	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**374**	mg/L	10.0	10.0	1		09/08/21 14:23		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**112**	mg/L	5.0	5.0	1		09/16/21 16:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/16/21 16:15		
Alkalinity, Total as CaCO3	**112**	mg/L	5.0	5.0	1		09/16/21 16:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.1**	mg/L	1.0	0.60	1		09/10/21 09:50	16887-00-6	
Fluoride	**0.15**	mg/L	0.10	0.050	1		09/10/21 09:50	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA
Pace Project No.: 92558254

Sample: PZ-37D **Lab ID: 92558254017** Collected: 09/03/21 12:20 Received: 09/03/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**153**	mg/L	3.0	1.5	3		09/10/21 15:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 647336
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254010, 92558254011, 92558254012, 92558254013, 92558254015, 92558254016, 92558254017

METHOD BLANK: 3395362 Matrix: Water
Associated Lab Samples: 92558254010, 92558254011, 92558254012, 92558254013, 92558254015, 92558254016, 92558254017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/15/21 17:34	
Magnesium	mg/L	ND	0.050	0.012	09/15/21 17:34	
Potassium	mg/L	ND	0.20	0.15	09/15/21 17:34	
Sodium	mg/L	ND	1.0	0.58	09/15/21 17:34	

LABORATORY CONTROL SAMPLE: 3395363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	
Magnesium	mg/L	1	1.1	106	80-120	
Potassium	mg/L	1	1.0	105	80-120	
Sodium	mg/L	1	1.2	116	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395364 3395365

Parameter	Units	92558254002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.6	1	1	8.6	8.8	93	118	75-125	3	20	
Magnesium	mg/L	4.2	1	1	5.2	5.4	97	113	75-125	3	20	
Potassium	mg/L	3.3	1	1	4.3	4.4	95	109	75-125	3	20	
Sodium	mg/L	10.3	1	1	11.3	11.5	93	120	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 647371
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254010, 92558254011, 92558254012, 92558254013, 92558254015, 92558254017

METHOD BLANK: 3395597 Matrix: Water
Associated Lab Samples: 92558254010, 92558254011, 92558254012, 92558254013, 92558254015, 92558254017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/16/21 09:21	
Arsenic	mg/L	ND	0.0050	0.0011	09/16/21 09:21	
Barium	mg/L	ND	0.0050	0.00067	09/16/21 09:21	
Beryllium	mg/L	ND	0.00050	0.000054	09/16/21 09:21	
Boron	mg/L	ND	0.040	0.0086	09/16/21 09:21	
Cadmium	mg/L	ND	0.00050	0.00011	09/16/21 09:21	
Chromium	mg/L	ND	0.0050	0.0011	09/16/21 09:21	
Cobalt	mg/L	ND	0.0050	0.00039	09/16/21 09:21	
Lead	mg/L	ND	0.0010	0.00089	09/16/21 09:21	
Lithium	mg/L	ND	0.030	0.00073	09/16/21 09:21	
Molybdenum	mg/L	ND	0.010	0.00074	09/16/21 09:21	
Selenium	mg/L	ND	0.0050	0.0014	09/16/21 09:21	
Thallium	mg/L	ND	0.0010	0.00018	09/16/21 09:21	

LABORATORY CONTROL SAMPLE: 3395598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	
Thallium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395599 3395600

Parameter	Units	92558254005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Arsenic	mg/L	0.0016J	0.1	0.1	0.10	0.10	102	100	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395599 3395600

Parameter	Units	92558254005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Barium	mg/L	0.0092	0.1	0.1	0.11	0.11	99	99	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Boron	mg/L	0.0090J	1	1	0.98	1.0	98	100	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Lithium	mg/L	0.0075J	0.1	0.1	0.11	0.11	101	101	75-125	0	20	
Molybdenum	mg/L	0.0010J	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.089	96	89	75-125	8	20	
Thallium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 647249 | Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A | Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254010, 92558254011, 92558254012, 92558254013, 92558254015

METHOD BLANK: 3394978 Matrix: Water
Associated Lab Samples: 92558254010, 92558254011, 92558254012, 92558254013, 92558254015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/15/21 14:08	

LABORATORY CONTROL SAMPLE: 3394979

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394980 3394981

Parameter	Units	92558254001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	95	95	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 648334
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254017

METHOD BLANK: 3400299 Matrix: Water
Associated Lab Samples: 92558254017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/21/21 10:38	

LABORATORY CONTROL SAMPLE: 3400300

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400301 3400302

Parameter	Units	92560635001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0023	92	91	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 644074
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254010, 92558254011

METHOD BLANK: 3379370 Matrix: Water
Associated Lab Samples: 92558254010, 92558254011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:50	

LABORATORY CONTROL SAMPLE: 3379371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	90-111	

SAMPLE DUPLICATE: 3379372

Parameter	Units	92558254005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	123	128	4	10	

SAMPLE DUPLICATE: 3379373

Parameter	Units	92558251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	150	151	1	10	

SAMPLE DUPLICATE: 3380417

Parameter	Units	92555945014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	396	414	4	10	H1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 645434
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254012, 92558254013

METHOD BLANK: 3385639 Matrix: Water
Associated Lab Samples: 92558254012, 92558254013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/07/21 13:45	

LABORATORY CONTROL SAMPLE: 3385640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	393	98	90-111	

SAMPLE DUPLICATE: 3385641

Parameter	Units	92558572001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	197	201	2	10	

SAMPLE DUPLICATE: 3385642

Parameter	Units	92558720005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	39.0	54.0	32	10	R1

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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 645665
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254015, 92558254017

METHOD BLANK: 3386951 Matrix: Water
Associated Lab Samples: 92558254015, 92558254017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/08/21 14:20	

LABORATORY CONTROL SAMPLE: 3386952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	391	98	90-111	

SAMPLE DUPLICATE: 3386953

Parameter	Units	92558259011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	163	174	7	10	

SAMPLE DUPLICATE: 3386954

Parameter	Units	92559417002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	546	557	2	10	

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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 646359
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558254015, 92558254016

METHOD BLANK: 3390347 Matrix: Water
Associated Lab Samples: 92558254015, 92558254016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/13/21 12:18	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/21 12:18	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/21 12:18	

LABORATORY CONTROL SAMPLE: 3390348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 3390349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390350 3390351

Parameter	Units	92559892005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	<5.0	50	50	51.8	50.2	104	100	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390352 3390353

Parameter	Units	92559527001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	13.8	50	50	69.9	70.0	112	112	80-120	0	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 647623
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558254017

METHOD BLANK: 3396696 Matrix: Water
Associated Lab Samples: 92558254017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/16/21 15:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/16/21 15:56	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/16/21 15:56	

LABORATORY CONTROL SAMPLE: 3396697

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.0	104	80-120	

LABORATORY CONTROL SAMPLE: 3396698

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3396699 3396700

Parameter	Units	92558254017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	112	50	50	165	166	106	108	80-120	1	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3396701 3396702

Parameter	Units	92560963002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	125	50	50	174	177	97	103	80-120	2	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 645269
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558254010, 92558254011

METHOD BLANK: 3385184 Matrix: Water
Associated Lab Samples: 92558254010, 92558254011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/06/21 06:59	
Fluoride	mg/L	ND	0.10	0.050	09/06/21 06:59	
Sulfate	mg/L	ND	1.0	0.50	09/06/21 06:59	

LABORATORY CONTROL SAMPLE: 3385185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	51.0	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385186 3385187

Parameter	Units	92558254009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.8	50	50	68.7	69.4	132	133	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3	3.3	130	130	90-110	0	10	M1
Sulfate	mg/L	ND	50	50	69.3	69.9	138	140	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385188 3385189

Parameter	Units	92558560001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.8	50	50	67.3	67.5	107	107	90-110	0	10	
Fluoride	mg/L	0.29	2.5	2.5	3.0	3.0	110	109	90-110	1	10	
Sulfate	mg/L	27.9	50	50	82.7	82.7	110	110	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 645412
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558254012, 92558254013

METHOD BLANK: 3385548 Matrix: Water
Associated Lab Samples: 92558254012, 92558254013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/08/21 05:04	
Fluoride	mg/L	ND	0.10	0.050	09/08/21 05:04	
Sulfate	mg/L	ND	1.0	0.50	09/08/21 05:04	

LABORATORY CONTROL SAMPLE: 3385549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385550 3385551

Parameter	Units	92559210006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	57.8	55.9	110	106	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.7	109	105	90-110	3	10	
Sulfate	mg/L	ND	50	50	54.9	54.2	108	107	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385552 3385553

Parameter	Units	92559417003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.3	50	50	57.3	56.1	108	106	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	105	102	90-110	3	10	
Sulfate	mg/L	1.3	50	50	56.2	55.0	110	107	90-110	2	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA
Pace Project No.: 92558254

QC Batch: 646087
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558254015, 92558254017

METHOD BLANK: 3388785 Matrix: Water
Associated Lab Samples: 92558254015, 92558254017

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/10/21 03:14	
Fluoride	mg/L	ND	0.10	0.050	09/10/21 03:14	
Sulfate	mg/L	ND	1.0	0.50	09/10/21 03:14	

LABORATORY CONTROL SAMPLE: 3388786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	52.9	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388787 3388788

Parameter	Units	92560111002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.9	50	50	60.1	60.7	109	110	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	1.2	1.1	47	43	90-110	7	10	M1
Sulfate	mg/L	ND	50	50	57.6	58.0	114	115	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388789 3388790

Parameter	Units	92559452001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.6	50	50	69.0	69.3	107	107	90-110	0	10	
Fluoride	mg/L		2.5	2.5	3.2	3.2	105	105	90-110	0	10	
Sulfate	mg/L		50	50	73.2	73.4	111	111	90-110	0	10	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES AMA
Pace Project No.: 92558254

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA
Pace Project No.: 92558254

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92558254013	**YGWC-24SA**				
92558254015	**YGWC-36A**				
92558254016	**YAMW-3**				
92558254017	**PZ-37D**				
92558254010	**AMA-EB-1**	EPA 3010A	647336	EPA 6010D	647380
92558254011	**AMA-EB-2**	EPA 3010A	647336	EPA 6010D	647380
92558254012	**AMA-DUP-1**	EPA 3010A	647336	EPA 6010D	647380
92558254013	**YGWC-24SA**	EPA 3010A	647336	EPA 6010D	647380
92558254015	**YGWC-36A**	EPA 3010A	647336	EPA 6010D	647380
92558254016	**YAMW-3**	EPA 3010A	647336	EPA 6010D	647380
92558254017	**PZ-37D**	EPA 3010A	647336	EPA 6010D	647380
92558254010	**AMA-EB-1**	EPA 3005A	647371	EPA 6020B	647475
92558254011	**AMA-EB-2**	EPA 3005A	647371	EPA 6020B	647475
92558254012	**AMA-DUP-1**	EPA 3005A	647371	EPA 6020B	647475
92558254013	**YGWC-24SA**	EPA 3005A	647371	EPA 6020B	647475
92558254015	**YGWC-36A**	EPA 3005A	647371	EPA 6020B	647475
92558254017	**PZ-37D**	EPA 3005A	647371	EPA 6020B	647475
92558254010	**AMA-EB-1**	EPA 7470A	647249	EPA 7470A	647342
92558254011	**AMA-EB-2**	EPA 7470A	647249	EPA 7470A	647342
92558254012	**AMA-DUP-1**	EPA 7470A	647249	EPA 7470A	647342
92558254013	**YGWC-24SA**	EPA 7470A	647249	EPA 7470A	647342
92558254015	**YGWC-36A**	EPA 7470A	647249	EPA 7470A	647342
92558254017	**PZ-37D**	EPA 7470A	648334	EPA 7470A	648431
92558254010	**AMA-EB-1**	SM 2540C-2011	644074		
92558254011	**AMA-EB-2**	SM 2540C-2011	644074		
92558254012	**AMA-DUP-1**	SM 2540C-2011	645434		
92558254013	**YGWC-24SA**	SM 2540C-2011	645434		
92558254015	**YGWC-36A**	SM 2540C-2011	645665		
92558254017	**PZ-37D**	SM 2540C-2011	645665		
92558254015	**YGWC-36A**	SM 2320B-2011	646359		
92558254016	**YAMW-3**	SM 2320B-2011	646359		
92558254017	**PZ-37D**	SM 2320B-2011	647623		
92558254010	**AMA-EB-1**	EPA 300.0 Rev 2.1 1993	645269		
92558254011	**AMA-EB-2**	EPA 300.0 Rev 2.1 1993	645269		
92558254012	**AMA-DUP-1**	EPA 300.0 Rev 2.1 1993	645412		
92558254013	**YGWC-24SA**	EPA 300.0 Rev 2.1 1993	645412		
92558254015	**YGWC-36A**	EPA 300.0 Rev 2.1 1993	646087		
92558254017	**PZ-37D**	EPA 300.0 Rev 2.1 1993	646087		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558254

92558254

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0 Type of Ice:

Cooler Temp Corrected (°C): 3.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9. AMA-EB-1 labeled 4P-EB-1 but time matches 8/26/21 1600
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO# : 92558254**

PM: MMG Due Date: 09/13/21

CLIENT: GA-GA Power

Items	BP4U-125 mL Plastic Unpreserved (N/A) (CT)	BP3N-250 mL Plastic Unpreserved (N/A)	BP3U-500 mL Plastic Unpreserved (N/A)	BP1U-1 Liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic HNO3 (pH < 2) (CT)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CT)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CT)	AG1H-1 liter Amber HCl (pH < 2)	AG0U-250 mL Amber Unpreserved (N/A) (CT)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG0S-250 mL Amber H2SO4 (pH < 2)	AG0U-250 mL Amber NaHSO3 (N/A)(CT)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9M-40 mL VOA H3PO4 (N/A)	VG9A-40 mL VOA Na2S2O3 & HCl (N/A)	VG9B-40 mL VOA NaHSO4 (N/A)	SP5T-125 mL Sterile Plastic (N/A - Lab)	WPT-250 mL Sterile Plastic (N/A - Lab)	BP3A-250 mL Plastic ZnAc2NaOH (9 > pH > 12)	AG0U-100 mL Amber Unpreserved vials (N/A)	VG9U-20 mL Scintillation vials (N/A)	DG8Q-40 mL Amber Unpreserved vials (N/A)
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A — Required Client Information:
Company: Acuity (GA Power)
Address: 3000 Pace's Ferry Rd
Suite 900, Atlanta, GA 30339
Email:
Phone: Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Sonny Stalvey
Copy To:
Purchase Order #:
Project Name: Yates Ash
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: mindi.dyer@pacelabs.com
Pace Profile #: 10842

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (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 TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	O.T. 504	App 304 Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	ABA-ES-1	WT																							
2	ABA-ES-2	WT																							
3	ABA-FS-1	WT																							
4	ABA-FS-2	WT																							
5	UP-ES-1	WT																							
6	UP-FS-1	WT	5/24	710					5	X		X													5.62
7	[illegible]	WT																							
8	UP-FS-2	WT																							
9	YDWA-01	WT	5/24	1015					5	X		X													551.50
10	YDWA-B	WT	5/24	1628					5	X		X													-
11	UP-DUP-1	WT	5/24	-					5	X		X													7.1650
12	YDWA-00	WT	5/24	1335					5	X		X													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	5/24	1440	[signature]	5/24	1440	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Mark Chet
SIGNATURE of SAMPLER: [signature] DATE Signed: 5/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page : 1 Of 1

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Arcadis, GA Power	Report To: Emily Stewart	Attention:
Address: 3000 Peachtree Rd	Copy To:	Company Name:
Suite 500, Atlanta, GA 30329		Address:
Email:	Purchase Order #	Pace Quote:
Phone: Fax:	Project Name: Yates (GA)	Pace Project Manager: Nicole.Eden@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Requested Analyses Filtered (Y/N): TDS	CLP, 6010	App IV/V Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		3/27	1045				5	X		X							X	X	X	X			Ph: 5.27
14	YGWA-18S	WT		3/27	1535				5	X		X							X	X	X	X			Ph: 5.40
15	YGWA-19I	WT		3/27	0935				5	X		X							X	X	X	X			Ph: 5.40
16	YGWA-20S	WT		3/27	1310				5	X		X							X	X	X	X			Ph: 5.57
17	YGWA-21I	WT																	X	X	X	X			
18	YGWC-22S	WT																	X	X	X	X	X		
19	YGWC-24DA	WT																	X	X	X	X			
20	AMA-DUP 1	WT																	X	X	X	X			
21	YGWC-26A	WT																	X	X	X	X	X		
22	YGWC-4S	WT																	X	X	X	X			
23	AMA-EB1			3/26	1610				5										X	X	X	X	X		
24	AMA-EB2			3/27	1340				5										X	X	X	X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] Arcadis	3/27		[signature]	3/27	1540	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Swan

SIGNATURE of SAMPLER: [signature] DATE Signed: 3/27/25

Temp in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92558254**

PM: NMG Due Date: 09/13/21

CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/2/21 KRM

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO# : 92558254**

PM: NMC Due Date: 09/13/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CL)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (CL)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (pH > 9)	BP4C-125 mL Plastic NaOH (pH > 12) (CL)	WGFU-Wide mouth Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CL)	AG1H-1 liter Amber HCl (pH < 2)	AG0U-250 ml 1 Amber Unpreserved (N/A) (CL)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3U(250ML)-250 mL Amber NAHO (N/A)(CL)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAX (6 vials per kit)-5035 kit (N/A)	VJ5X (3 vials per kit)-Methanol kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - 144)	SP5T-250 mL Sterile Plastic (N/A - 144)	[illegible]	BP3N-250 mL Plastic NaHSO4 (0.9-1.5)	AG0U-250 mL Amber Unpreserved (N/A)	VG9U-20 mL ScintVial vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																						
2		1	1			1																						
3		1	1			1																						
4		1	1			1																						
5		1	1			1																						
6		1	1			1																						
7		1	1			1																						
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:
Company: Georgia Power
Address: Atlanta, GA
Email To: SCS Contacts
Phone: Fax:
Requested Due Date: 10 Day

Section B — Required Project Information:
Report To: [redacted]
Copy To: [redacted]
Purchase Order #:
Project Name: [redacted]
Project Number:

Section C — Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring/Nicole D'Oleo
Pace Profile #: 10840

Regulatory Agency: GDR
State / Location: GA

Requested Analysis Filtered (Y/N)

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

Analyses Test: TDS 2540C; Anions Sulfe 300.0; App III Metals; App. IV Metals (No Ti); Radium 226/228 9315/9320; Alkalinity; Cations (Na, K, Mg, Ca); Residual Chlorine (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other
1	[redacted]	WT	G														
2	[redacted]	WT	G														
3	[redacted]	WT	G														
4	[redacted]	WT	G														
5	[redacted]	WT	G														
6	[redacted]	WT	G														
7	[redacted]	WT	G														
8	[redacted]	WT	G														
9	[redacted]	WT	G														
10	[redacted] AMA-DMP-1	WT	G	9/1	—				5	✓		✓					
11	[redacted] YGWC-49A	WT	G	9/1	1025				5	✓		✓					
12	[redacted] YGWR-21I	WT	G	9/1	1140				5	✓		✓					

Items 10–11 (Analyses Test): 6/6/6

Item 11: pH 5.22
Item 12: pH 6.65

ADDITIONAL COMMENTS
Anions Sulfe 300.0 (DLF sulfate)
App II Metals: Boron 6020B,Ca 6010D
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[signature] / Arcadis	9/2/21	1530	[signature] / Arcadis	9/2/21	1530	
[signature]	9/2/21	1702	[signature] / PACE	9/2/21	1702	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Joe Sursen
SIGNATURE of SAMPLER: [signature]
DATE Signed: 9/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

October 29, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 27, 2021 and September 02, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
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SAMPLE SUMMARY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92558246001	**AMA-EB-1**	Water	08/26/21 14:35	08/27/21 16:40
92558246002	**AMA-FB-1**	Water	08/25/21 18:00	08/27/21 16:40
92558246003	**YAMW-4**	Water	08/25/21 17:50	08/27/21 16:40
92558246004	**YGWC-41**	Water	08/26/21 10:25	08/27/21 16:40
92558246005	**AMA-DUP-2**	Water	08/26/21 00:00	08/27/21 16:40
92558246006	**YAMW-5**	Water	08/26/21 11:25	08/27/21 16:40
92558246007	**YGWC-38**	Water	08/26/21 12:40	08/27/21 16:40
92558246008	**YAMW-1**	Water	09/01/21 10:36	09/02/21 17:02
92558246009	**PZ-35**	Water	09/01/21 12:00	09/02/21 17:02
92558246010	**YAMW-2**	Water	09/01/21 13:50	09/02/21 17:02
92558246011	**YGWC-49**	Water	09/01/21 15:30	09/02/21 17:02

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92558246001	**AMA-EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558246002	**AMA-FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558246003	**YAMW-4**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558246004	**YGWC-41**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558246005	**AMA-DUP-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558246006	**YAMW-5**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558246007	**YGWC-38**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558246008	**YAMW-1**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92558246009	**PZ-35**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92558246010	**YAMW-2**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92558246011	**YGWC-49**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558246001	**AMA-EB-1**					
EPA 9315	Radium-226	0.186 ± 0.203 (0.407) C:88% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	-0.329 ± 0.316 (0.817) C:78% T:78%	pCi/L		09/20/21 14:37	
Total Radium Calculation	Total Radium	0.186 ± 0.519 (1.22)	pCi/L		09/24/21 14:38	
92558246002	**AMA-FB-1**					
EPA 9315	Radium-226	-0.0367 ± 0.182 (0.502) C:94% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	0.155 ± 0.331 (0.734) C:78% T:84%	pCi/L		09/20/21 14:37	
Total Radium Calculation	Total Radium	0.155 ± 0.513 (1.24)	pCi/L		09/24/21 14:38	
92558246003	**YAMW-4**					
EPA 9315	Radium-226	0.0991 ± 0.174 (0.394) C:91% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	-0.121 ± 0.344 (0.829) C:78% T:81%	pCi/L		09/20/21 14:37	
Total Radium Calculation	Total Radium	0.0991 ± 0.518 (1.22)	pCi/L		09/24/21 14:38	
92558246004	**YGWC-41**					
EPA 9315	Radium-226	0.0164 ± 0.165 (0.433) C:88% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	0.340 ± 0.363 (0.754) C:78% T:88%	pCi/L		09/20/21 14:37	
Total Radium Calculation	Total Radium	0.356 ± 0.528 (1.19)	pCi/L		09/24/21 14:38	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558246005	**AMA-DUP-2**					
EPA 9315	Radium-226	0.0779 ± 0.202 (0.483) C:89% T:NA	pCi/L		09/22/21 08:12	
EPA 9320	Radium-228	0.230 ± 0.343 (0.739) C:78% T:91%	pCi/L		09/20/21 14:37	
Total Radium Calculation	Total Radium	0.308 ± 0.545 (1.22)	pCi/L		09/24/21 14:38	
92558246006	**YAMW-5**					
EPA 9315	Radium-226	0.693 ± 0.308 (0.370) C:91% T:NA	pCi/L		09/22/21 08:12	
EPA 9320	Radium-228	0.0312 ± 0.368 (0.847) C:78% T:83%	pCi/L		09/20/21 14:37	
Total Radium Calculation	Total Radium	0.724 ± 0.676 (1.22)	pCi/L		09/24/21 14:38	
92558246007	**YGWC-38**					
EPA 9315	Radium-226	0.111 ± 0.134 (0.280) C:97% T:NA	pCi/L		09/22/21 09:35	
EPA 9320	Radium-228	0.316 ± 0.339 (0.703) C:76% T:84%	pCi/L		09/20/21 11:12	
Total Radium Calculation	Total Radium	0.427 ± 0.473 (0.983)	pCi/L		09/24/21 14:38	
92558246008	**YAMW-1**					
EPA 9315	Radium-226	0.210 ± 0.172 (0.326) C:94% T:NA	pCi/L		10/19/21 08:55	
EPA 9320	Radium-228	0.466 ± 0.393 (0.789) C:77% T:81%	pCi/L		10/14/21 11:15	
Total Radium Calculation	Total Radium	0.676 ± 0.565 (1.12)	pCi/L		10/20/21 17:24	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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SUMMARY OF DETECTION

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558246009	**PZ-35**					
EPA 9315	Radium-226	0.231 ± 0.193 (0.380) C:92% T:NA	pCi/L		10/19/21 10:31	
EPA 9320	Radium-228	0.465 ± 0.469 (0.971) C:74% T:80%	pCi/L		10/14/21 11:15	
Total Radium Calculation	Total Radium	0.696 ± 0.662 (1.35)	pCi/L		10/20/21 17:24	
92558246010	**YAMW-2**					
EPA 9315	Radium-226	0.0947 ± 0.133 (0.290) C:98% T:NA	pCi/L		10/19/21 10:31	
EPA 9320	Radium-228	0.666 ± 0.424 (0.800) C:77% T:80%	pCi/L		10/14/21 11:15	
Total Radium Calculation	Total Radium	0.761 ± 0.557 (1.09)	pCi/L		10/20/21 17:24	
92558246011	**YGWC-49**					
EPA 9315	Radium-226	0.165 ± 0.179 (0.375) C:95% T:NA	pCi/L		10/19/21 08:56	
EPA 9320	Radium-228	0.521 ± 0.405 (0.803) C:77% T:85%	pCi/L		10/14/21 11:15	
Total Radium Calculation	Total Radium	0.686 ± 0.584 (1.18)	pCi/L		10/20/21 17:24	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: AMA-EB-1 **Lab ID: 92558246001** Collected: 08/26/21 14:35 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.186 ± 0.203 (0.407) C:88% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.329 ± 0.316 (0.817) C:78% T:78%**	pCi/L	09/20/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.186 ± 0.519 (1.22)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: AMA-FB-1 **Lab ID: 92558246002** Collected: 08/25/21 18:00 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0367 ± 0.182 (0.502) C:94% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.155 ± 0.331 (0.734) C:78% T:84%**	pCi/L	09/20/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.155 ± 0.513 (1.24)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: YAMW-4 **Lab ID: 92558246003** Collected: 08/25/21 17:50 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0991 ± 0.174 (0.394) C:91% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.121 ± 0.344 (0.829) C:78% T:81%**	pCi/L	09/20/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0991 ± 0.518 (1.22)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: YGWC-41 **Lab ID: 92558246004** Collected: 08/26/21 10:25 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0164 ± 0.165 (0.433) C:88% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.340 ± 0.363 (0.754) C:78% T:88%**	pCi/L	09/20/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.356 ± 0.528 (1.19)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: AMA-DUP-2 **Lab ID: 92558246005** Collected: 08/26/21 00:00 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0779 ± 0.202 (0.483) C:89% T:NA**	pCi/L	09/22/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.230 ± 0.343 (0.739) C:78% T:91%**	pCi/L	09/20/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.308 ± 0.545 (1.22)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: YAMW-5 **Lab ID: 92558246006** Collected: 08/26/21 11:25 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.693 ± 0.308 (0.370) C:91% T:NA**	pCi/L	09/22/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0312 ± 0.368 (0.847) C:78% T:83%**	pCi/L	09/20/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.724 ± 0.676 (1.22)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: YGWC-38 **Lab ID: 92558246007** Collected: 08/26/21 12:40 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.111 ± 0.134 (0.280) C:97% T:NA**	pCi/L	09/22/21 09:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.316 ± 0.339 (0.703) C:76% T:84%**	pCi/L	09/20/21 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.427 ± 0.473 (0.983)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: YAMW-1 **Lab ID: 92558246008** Collected: 09/01/21 10:36 Received: 09/02/21 17:02 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.210 ± 0.172 (0.326) C:94% T:NA**	pCi/L	10/19/21 08:55	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.466 ± 0.393 (0.789) C:77% T:81%**	pCi/L	10/14/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.676 ± 0.565 (1.12)**	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: PZ-35 **Lab ID: 92558246009** Collected: 09/01/21 12:00 Received: 09/02/21 17:02 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.231 ± 0.193 (0.380) C:92% T:NA**	pCi/L	10/19/21 10:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.465 ± 0.469 (0.971) C:74% T:80%**	pCi/L	10/14/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.696 ± 0.662 (1.35)**	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: YAMW-2 **Lab ID: 92558246010** Collected: 09/01/21 13:50 Received: 09/02/21 17:02 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0947 ± 0.133 (0.290) C:98% T:NA**	pCi/L	10/19/21 10:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.666 ± 0.424 (0.800) C:77% T:80%**	pCi/L	10/14/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.761 ± 0.557 (1.09)**	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Sample: YGWC-49 **Lab ID: 92558246011** Collected: 09/01/21 15:30 Received: 09/02/21 17:02 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.165 ± 0.179 (0.375) C:95% T:NA**	pCi/L	10/19/21 08:56	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.521 ± 0.405 (0.803) C:77% T:85%**	pCi/L	10/14/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.686 ± 0.584 (1.18)**	pCi/L	10/20/21 17:24	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

QC Batch: 467255 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558246008, 92558246009, 92558246010, 92558246011

METHOD BLANK: 2256295 Matrix: Water
Associated Lab Samples: 92558246008, 92558246009, 92558246010, 92558246011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.151 ± 0.301 (0.746) C:75% T:86%	pCi/L	10/14/21 11:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

QC Batch: 463915
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558246007

METHOD BLANK: 2239836
Matrix: Water
Associated Lab Samples: 92558246007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0847 ± 0.121 (0.363) C:95% T:NA	pCi/L	09/22/21 09:35	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

QC Batch: 466957 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558246008, 92558246009, 92558246010, 92558246011

METHOD BLANK: 2255015 Matrix: Water
Associated Lab Samples: 92558246008, 92558246009, 92558246010, 92558246011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0260 ± 0.142 (0.353) C:102% T:NA	pCi/L	10/19/21 08:55	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

QC Batch: 463405 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558246001, 92558246002, 92558246003, 92558246004, 92558246005, 92558246006

METHOD BLANK: 2237315 Matrix: Water
Associated Lab Samples: 92558246001, 92558246002, 92558246003, 92558246004, 92558246005, 92558246006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0923 ± 0.177 (0.406) C:93% T:NA	pCi/L	09/22/21 08:46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

QC Batch: 463403 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558246001, 92558246002, 92558246003, 92558246004, 92558246005, 92558246006

METHOD BLANK: 2237313 Matrix: Water
Associated Lab Samples: 92558246001, 92558246002, 92558246003, 92558246004, 92558246005, 92558246006

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.433 ± 0.419 (0.858) C:81% T:72%	pCi/L	09/20/21 14:35	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

QC Batch: 463914
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558246007

METHOD BLANK: 2239835
Matrix: Water
Associated Lab Samples: 92558246007

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.493 ± 0.373 (0.728) C:78% T:74%	pCi/L	09/20/21 11:12	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA-R6 RADS
Pace Project No.: 92558246

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92558246001	**AMA-EB-1**	EPA 9315	463405		
92558246002	**AMA-FB-1**	EPA 9315	463405		
92558246003	**YAMW-4**	EPA 9315	463405		
92558246004	**YGWC-41**	EPA 9315	463405		
92558246005	**AMA-DUP-2**	EPA 9315	463405		
92558246006	**YAMW-5**	EPA 9315	463405		
92558246007	**YGWC-38**	EPA 9315	463915		
92558246008	**YAMW-1**	EPA 9315	466957		
92558246009	**PZ-35**	EPA 9315	466957		
92558246010	**YAMW-2**	EPA 9315	466957		
92558246011	**YGWC-49**	EPA 9315	466957		
92558246001	**AMA-EB-1**	EPA 9320	463403		
92558246002	**AMA-FB-1**	EPA 9320	463403		
92558246003	**YAMW-4**	EPA 9320	463403		
92558246004	**YGWC-41**	EPA 9320	463403		
92558246005	**AMA-DUP-2**	EPA 9320	463403		
92558246006	**YAMW-5**	EPA 9320	463403		
92558246007	**YGWC-38**	EPA 9320	463914		
92558246008	**YAMW-1**	EPA 9320	467255		
92558246009	**PZ-35**	EPA 9320	467255		
92558246010	**YAMW-2**	EPA 9320	467255		
92558246011	**YGWC-49**	EPA 9320	467255		
92558246001	**AMA-EB-1**	Total Radium Calculation	465559		
92558246002	**AMA-FB-1**	Total Radium Calculation	465559		
92558246003	**YAMW-4**	Total Radium Calculation	465559		
92558246004	**YGWC-41**	Total Radium Calculation	465559		
92558246005	**AMA-DUP-2**	Total Radium Calculation	465559		
92558246006	**YAMW-5**	Total Radium Calculation	465559		
92558246007	**YGWC-38**	Total Radium Calculation	465559		
92558246008	**YAMW-1**	Total Radium Calculation	469112		
92558246009	**PZ-35**	Total Radium Calculation	469112		
92558246010	**YAMW-2**	Total Radium Calculation	469112		
92558246011	**YGWC-49**	Total Radium Calculation	469112		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558246

92558246

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0 Type of Ice:

Cooler Temp Corrected (°C): 3.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: W	☑ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project #

WO# : 92558246

PM: NMG Due Date: 09/20/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP1R	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VG0U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			✓ 1																		✓ 2				
2		1	1			✓ 1																		✓ 2				
3		1	1			✓ 1																		✓ 2				
4		1	1			✓ 1																		✓ 2				
5		1	1			✓ 1																		✓ 2				
6		1	1			✓ 1																		✓ 2				
7		1	1			✓ 1																		✓ 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 DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: ___ Of ___

Section A — Required Client Information:
Company: Georgia Power
Address: Atlanta, GA
Email To: SCS and Arcadis Contacts
Phone: ___ Fax: ___
Requested Due Date: 10 Day

Section B — Required Project Information:
Report To: SCS Contacts
Copy To: Arcadis Contacts
Purchase Order #:
Project Name: Yates AMA-R6
Project Number:

Section C — Invoice Information:
Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring/Nicole D'Oleo
Pace Profile #: 10845

Regulatory Agency: CCR
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start DATE	Collected Start TIME	Collected End DATE	Collected End TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS 2540C	Anions Suite 300.0	App III Metals	App. IV Metals (No Tl)	Radium 226/228 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)	Sample Conditions
1	AMA-EB-1	WT	G	8-24	1435					2		2						x	x	x	x	x				–
2	[illegible, struck through]	WT	G															x	x	x	x	x				–
3	AMA-FB-1	WT	G	8-25	1400					2		3						x	x	x	x	x				–
4	[illegible, struck through]	WT	G															x	x	x	x	x				–
5	[illegible, struck through]	WT	G															x	x	x	x	x	x	x		pH
6	[illegible, struck through]	WT	G															x	x	x	x	x				pH
7	[illegible, struck through]	WT	G		-													x	x	x	x	x				pH
8	[illegible, struck through]	WT	G															x	x	x	x	x	x	x		pH
9	[illegible, struck through]	WT	G															x	x	x	x	x				pH
10	[illegible, struck through] YAMW-4	WT	G	8-25	1730					2		3						x	x	x	x	x	x	x		pH 6.79
11	YGWC-41	WT	G	8-24	1025					2		3						x	x	x	x	x	x	x		pH 6.77
12	AMA-DUP-2	WT	G	8-24	-					2		3						x	x	x	x	x				pH —

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] / Arcadis	8-26-21	1410	[signature]	8/26	1410	
App III Metals: Boron 6020B, Ca 6010D	[signature]	8/27	1640	[signature]	8/27/21	1640	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Katie Pukenicz
SIGNATURE of SAMPLER: [signature]
DATE Signed: 8-26-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 2 Of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis (GA Power)	Report To:	Sadiq Steever	Attention:	
Address:	2839 Paces Ferry Rd	Copy To:		Company Name:	
Suite 900, Atlanta, GA 30339				Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates RDANA	Pace Project Manager:	nicole.d'oleo@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	10840

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	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	TDS	CL F SO4	App III/IV Metals	III/IV + Cations	Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWC-41	WT																			x					
14	YGWC-42	WT																			x					
15	YGWC-43	WT																			x					
16	YAMW-5			8/26	1125				5									X	X				X	X		PA:535
17	YGWC-38			8/26	1240				5									X	X		X		X			PA:454
18																										
19																										
20																										
21																										
22																										
23																										
24																										

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	8/27		[signature]	8/27/21	[illegible]	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92558246**

PM: NMC Due Date: 09/20/21

CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/2/21 KAM

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Project # WO# : 92558246

PM: NMG Due Date: 09/28/21

CLIENT: GA-GA Power

Item #	BP4U-125 mL Plastic Unpreserved (N/A) (CH)	BP1N-250 mL Plastic Unpreserved (N/A)	BP2N-500 mL Plastic Unpreserved (N/A)	BP3N-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic HNO3 (pH < 2) (CH)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4S-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CY)	WGFU-White-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CH)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (CH)	AG2S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3B(DG9H)-250 mL Amber Na2S2O3 (N/A)(CH)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NaHSO4 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAX (6 vials per kit)-5035A kit (N/A)	VJ3N (3 vials per kit)-methanol kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP3A-250 mL Plastic (NH4)2SO4 (0.1-0.7)	AG0U-100 mL Amber Unpreserved vial (N/A)	WGKU-8 oz Unpreserved vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1																								
2		1	1																								
3		1	1																								
4		1	1																								
5		1	1																								
6		1	1																								
7		1	1																								
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.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at [illegible]

Page : 2 Of 2

Section A — Required Client Information:
Company: Arcadis (GA Power)
Address: [illegible]
Email:
Phone: Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: [illegible]
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency:
State / Location: GA

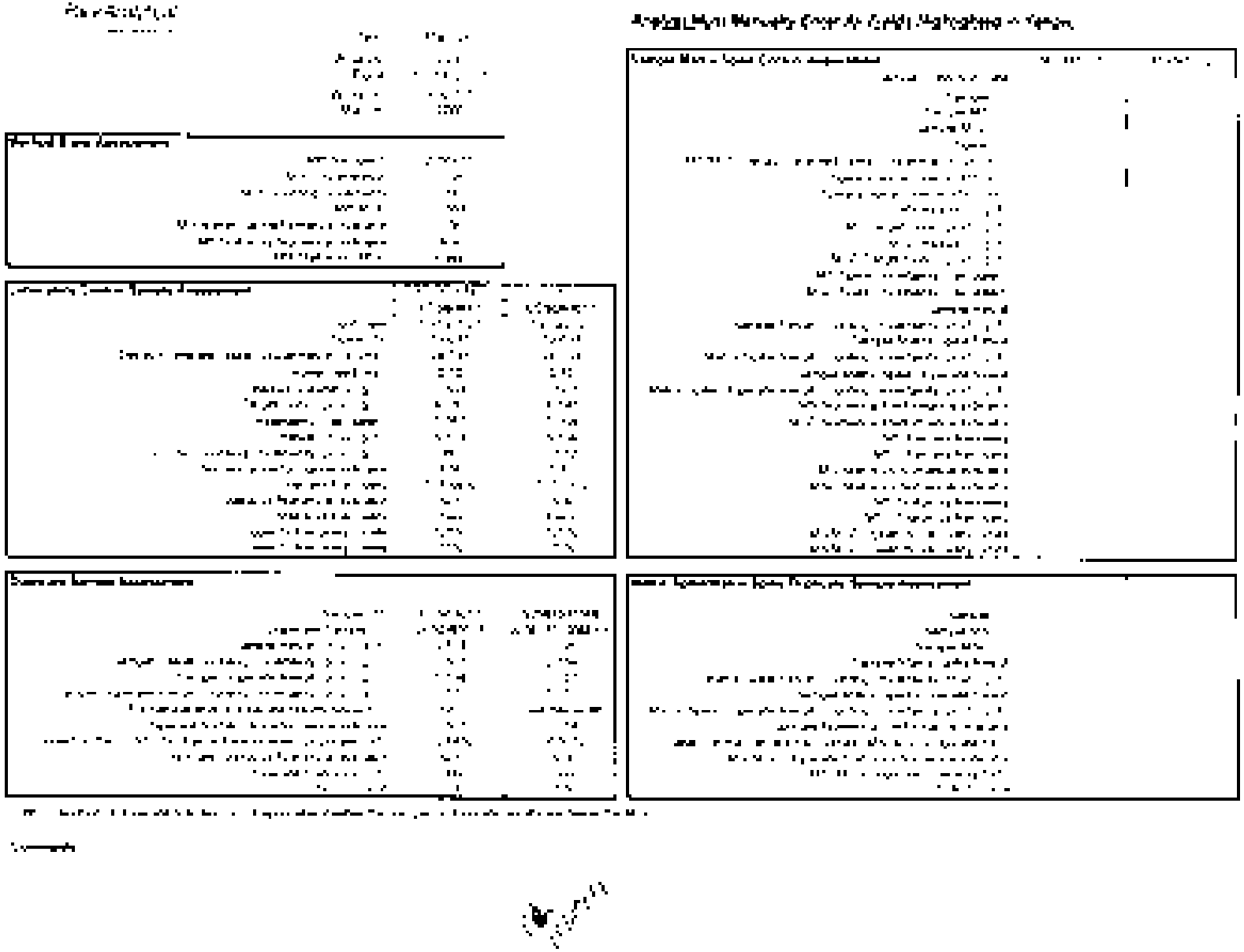
ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE/TIME	COLLECTED END DATE/TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	RAD 9315/9320	Alkalinity	Na, K, Mg, Ca	Residual Chlorine (Y/N)
13	[illegible]	WT																X					
14	[illegible]	WT																X					
15	[illegible]	WT																X					
16	YAMW-1			9/1/21 1030			5	X		X						X	X	X	X	X	X	X	5.97 pH
17	P2-35			9/1/21 1200			5	X		X						X	X	X	X	X	X	X	6.52 pH
18	YAMW-2			9/1/21 1350			5	X		X						X	X	X	X	X			6.67 pH
19	YGWC-49			9/1/21 1530			5	X		X						X	X	X	X	X			5.15 pH
20																							
21																							
22																							
23																							
24																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	9/2/21	1530	[signature] / Arcadis	9/2/21	1530	
	[signature]	9/2/21	1702	[signature] Pace	9/2/21	1702	

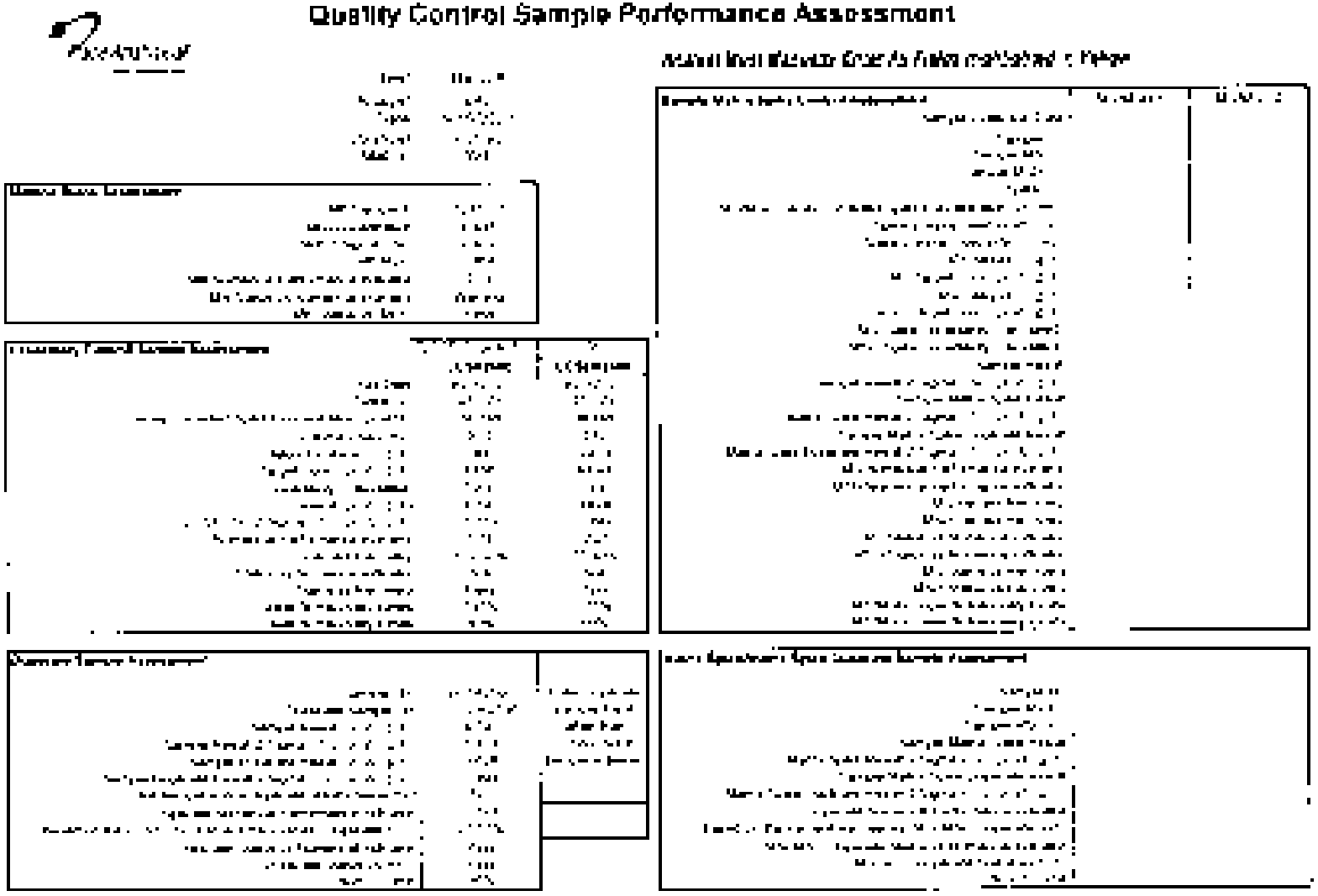
SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: [illegible] Chest
SIGNATURE of SAMPLER: [signature]
DATE Signed: 9/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

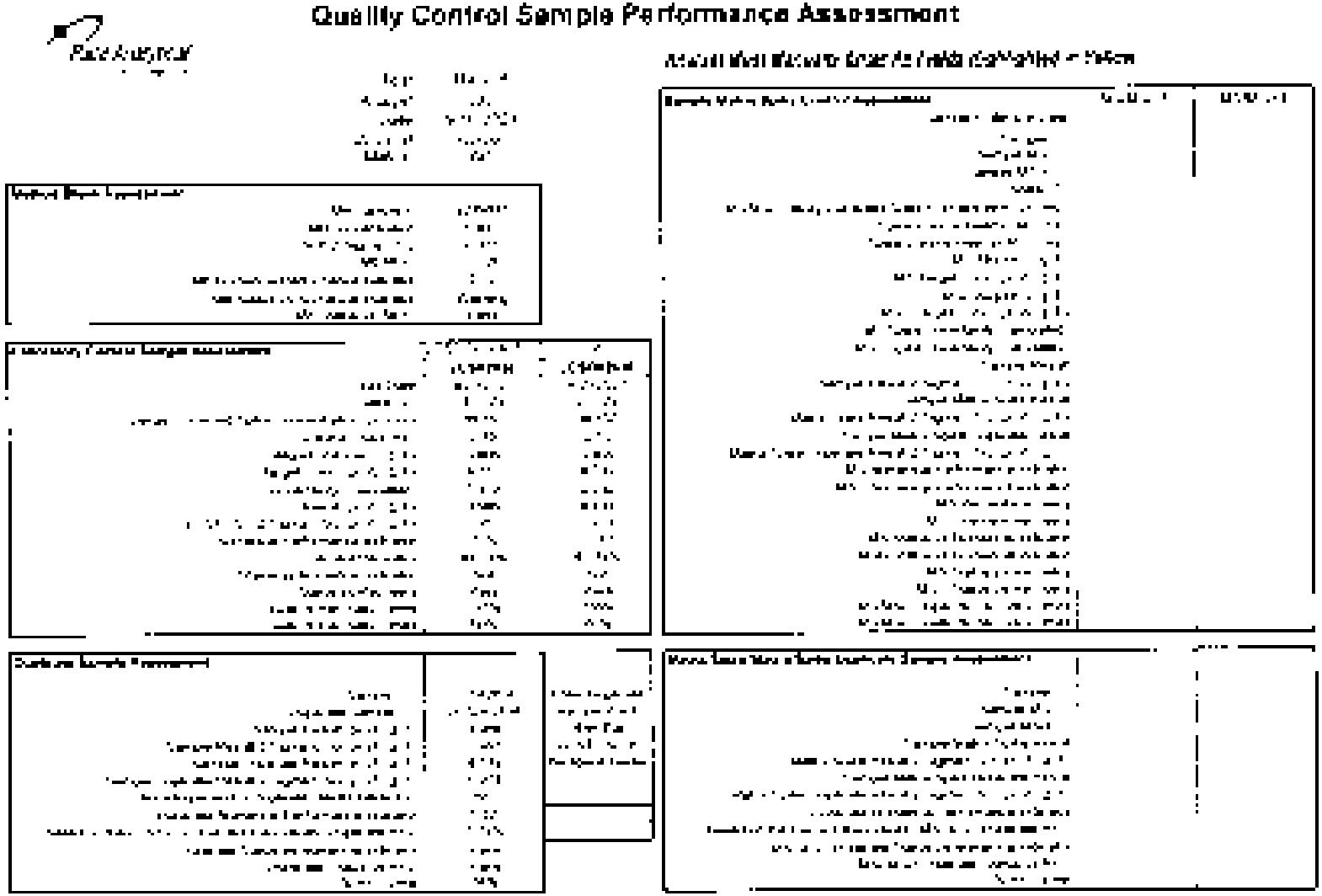
Quality Control Sample Performance Assessment



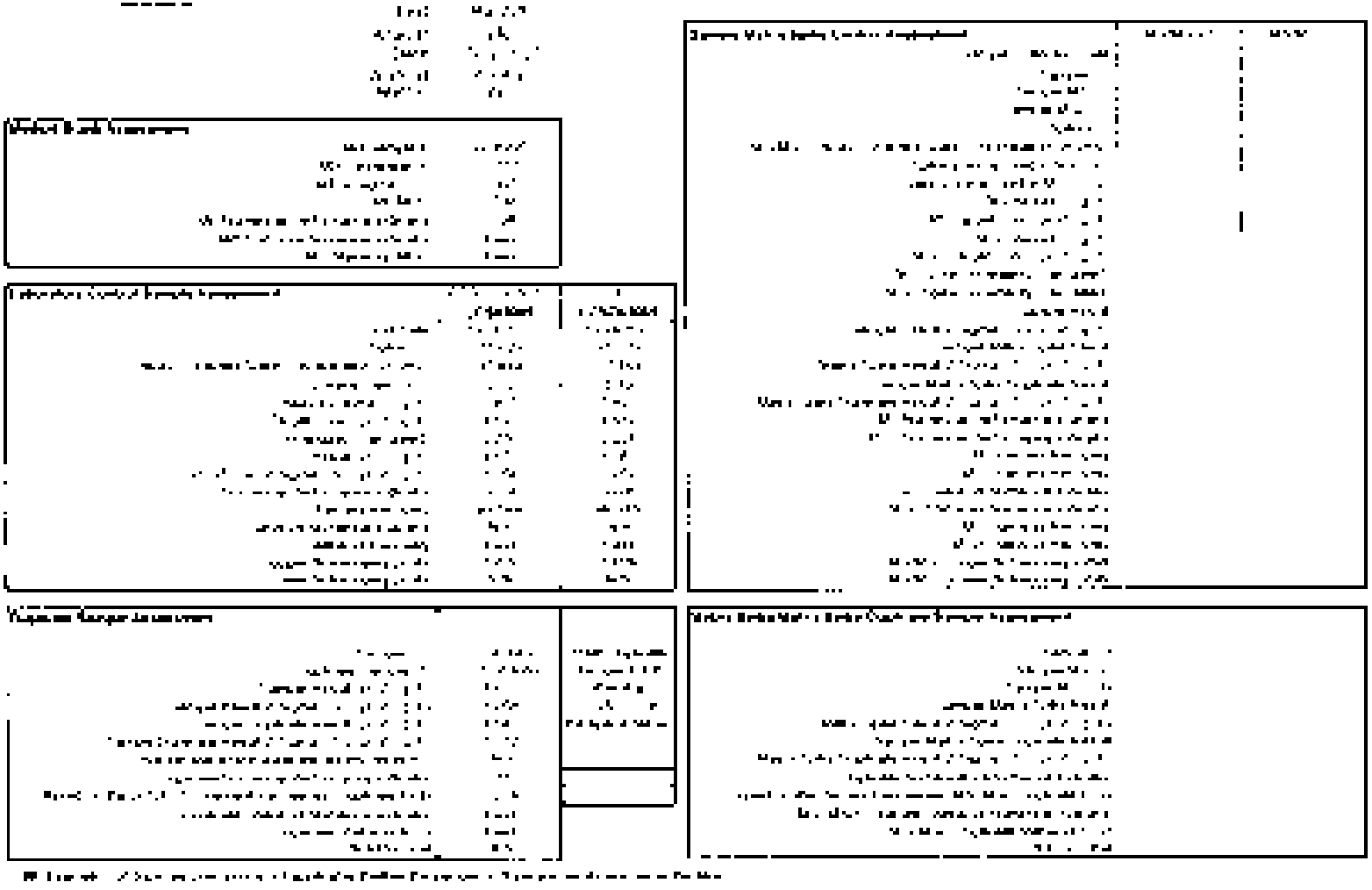
Quality Control Sample Performance Assessment



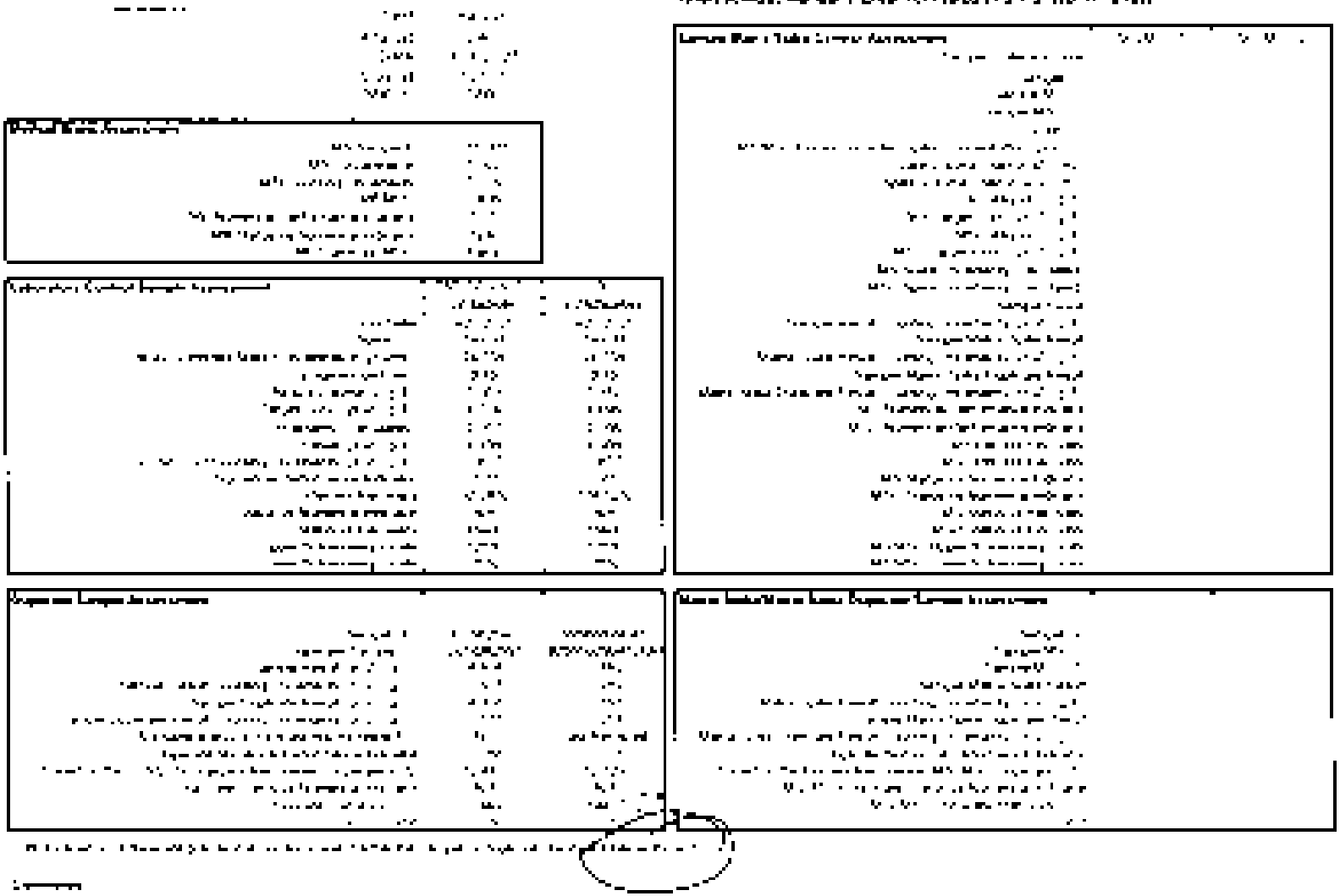
Quality Control Sample Performance Assessment



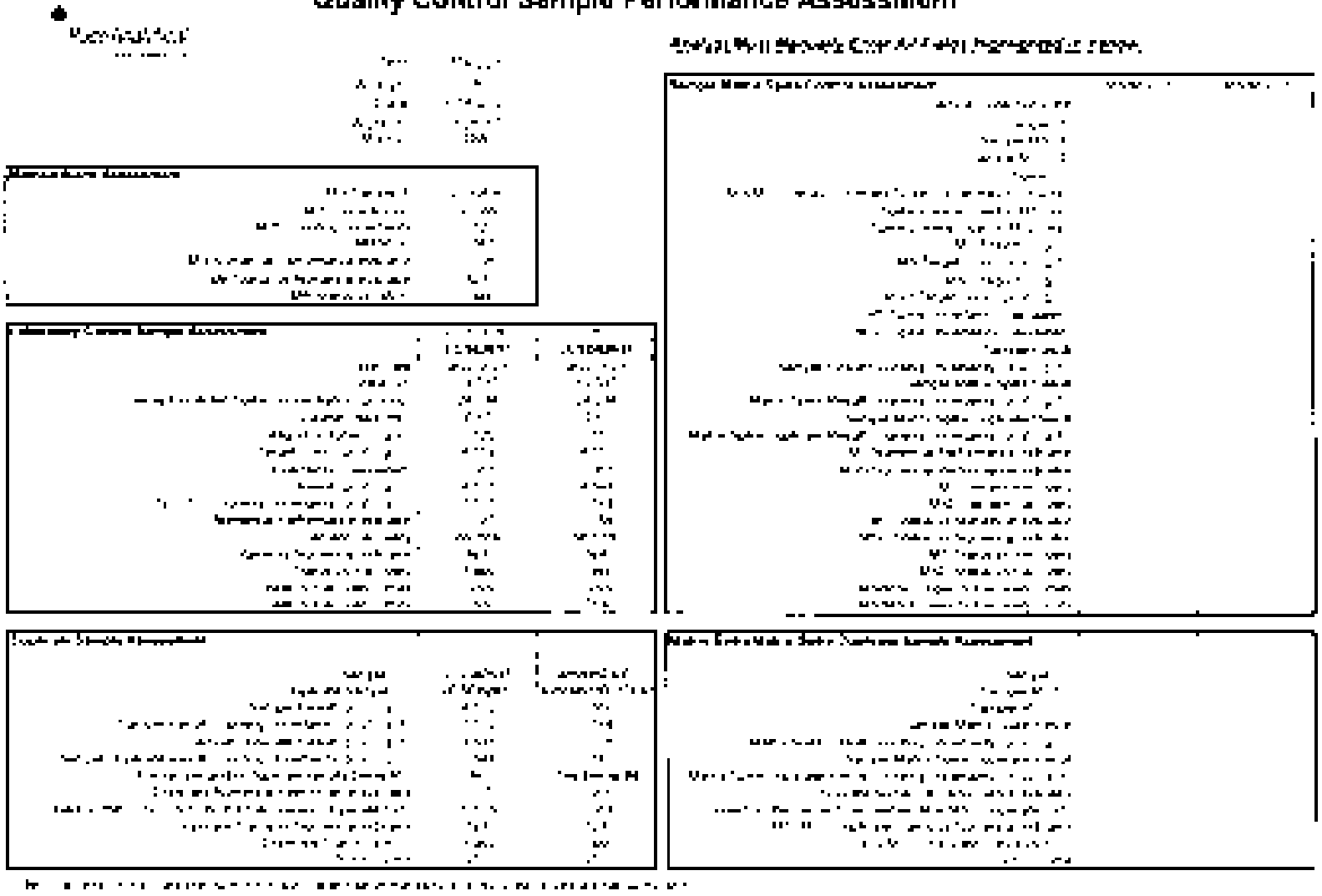
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

September 29, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on August 25, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557720001	**YGWC-42**	Water	08/25/21 13:25	08/25/21 17:15
92557720002	**PZ-37**	Water	08/25/21 12:30	08/25/21 17:15
92557720003	**AMA-DUP-4**	Water	08/25/21 00:00	08/25/21 17:15
92557720004	**YGWC-23S**	Water	08/25/21 15:10	08/25/21 17:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92557720001	**YGWC-42**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92557720002	**PZ-37**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3
92557720003	**AMA-DUP-4**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557720004	**YGWC-23S**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557720001	**YGWC-42**					
	Performed by	CUSTOMER			08/26/21 09:22	
	pH	6.73	Std. Units		08/26/21 09:22	
EPA 6010D	Potassium	11.5	mg/L	0.20	09/09/21 14:50	M1
EPA 6010D	Sodium	36.4	mg/L	1.0	09/09/21 14:50	M1
EPA 6010D	Calcium	79.9	mg/L	1.0	09/09/21 14:50	M1
EPA 6010D	Magnesium	80.9	mg/L	0.050	09/09/21 14:50	M1
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	09/09/21 16:42	
EPA 6020B	Barium	0.027	mg/L	0.0050	09/09/21 16:42	
EPA 6020B	Boron	13.5	mg/L	0.40	09/10/21 10:46	
EPA 6020B	Cobalt	0.0014J	mg/L	0.0050	09/09/21 16:42	
EPA 6020B	Lithium	0.053	mg/L	0.030	09/09/21 16:42	
EPA 6020B	Molybdenum	0.00078J	mg/L	0.010	09/09/21 16:42	
EPA 6020B	Selenium	0.043	mg/L	0.0050	09/09/21 16:42	
SM 2540C-2011	Total Dissolved Solids	886	mg/L	20.0	08/28/21 16:49	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	38.5	mg/L	5.0	09/03/21 19:02	
SM 2320B-2011	Alkalinity, Total as CaCO3	38.5	mg/L	5.0	09/03/21 19:02	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	09/01/21 21:29	
EPA 300.0 Rev 2.1 1993	Sulfate	500	mg/L	11.0	09/02/21 20:26	
92557720002	**PZ-37**					
	Performed by	CUSTOMER			08/26/21 09:22	
	pH	5.48	Std. Units		08/26/21 09:22	
EPA 6010D	Potassium	7.3	mg/L	0.20	09/09/21 15:09	
EPA 6010D	Sodium	34.6	mg/L	1.0	09/09/21 15:09	
EPA 6010D	Calcium	106	mg/L	1.0	09/09/21 15:09	
EPA 6010D	Magnesium	53.1	mg/L	0.050	09/09/21 15:09	
EPA 6020B	Arsenic	0.0014J	mg/L	0.0050	09/09/21 16:48	
EPA 6020B	Barium	0.035	mg/L	0.0050	09/09/21 16:48	
EPA 6020B	Beryllium	0.00059	mg/L	0.00050	09/09/21 16:48	
EPA 6020B	Boron	10.3	mg/L	0.40	09/10/21 10:52	
EPA 6020B	Cadmium	0.00094	mg/L	0.00050	09/09/21 16:48	
EPA 6020B	Cobalt	0.0068	mg/L	0.0050	09/09/21 16:48	
EPA 6020B	Lithium	0.023J	mg/L	0.030	09/09/21 16:48	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	09/09/21 16:48	
EPA 6020B	Selenium	0.20	mg/L	0.0050	09/09/21 16:48	
SM 2540C-2011	Total Dissolved Solids	876	mg/L	20.0	08/28/21 16:49	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	29.9	mg/L	5.0	09/03/21 19:09	
SM 2320B-2011	Alkalinity, Total as CaCO3	29.9	mg/L	5.0	09/03/21 19:09	
EPA 300.0 Rev 2.1 1993	Chloride	7.0	mg/L	1.0	09/01/21 21:44	
EPA 300.0 Rev 2.1 1993	Sulfate	472	mg/L	11.0	09/02/21 20:41	
92557720003	**AMA-DUP-4**					
EPA 6010D	Potassium	7.5	mg/L	0.20	09/09/21 15:14	
EPA 6010D	Sodium	35.3	mg/L	1.0	09/09/21 15:14	
EPA 6010D	Calcium	108	mg/L	1.0	09/09/21 15:14	
EPA 6010D	Magnesium	54.7	mg/L	0.050	09/09/21 15:14	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	09/09/21 16:54	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557720003	**AMA-DUP-4**					
EPA 6020B	Barium	0.036	mg/L	0.0050	09/09/21 16:54	
EPA 6020B	Beryllium	0.00059	mg/L	0.00050	09/09/21 16:54	
EPA 6020B	Boron	10.4	mg/L	0.40	09/10/21 10:58	
EPA 6020B	Cadmium	0.00093	mg/L	0.00050	09/09/21 16:54	
EPA 6020B	Cobalt	0.0060	mg/L	0.0050	09/09/21 16:54	
EPA 6020B	Lithium	0.022J	mg/L	0.030	09/09/21 16:54	
EPA 6020B	Molybdenum	0.0011J	mg/L	0.010	09/09/21 16:54	
EPA 6020B	Selenium	0.20	mg/L	0.0050	09/09/21 16:54	
SM 2540C-2011	Total Dissolved Solids	822	mg/L	20.0	08/31/21 16:24	
EPA 300.0 Rev 2.1 1993	Chloride	6.9	mg/L	1.0	09/01/21 21:59	
EPA 300.0 Rev 2.1 1993	Sulfate	470	mg/L	11.0	09/02/21 20:56	
92557720004	**YGWC-23S**					
	Performed by	CUSTOMER			08/26/21 09:22	
	pH	5.46	Std. Units		08/26/21 09:22	
EPA 6010D	Potassium	1.1	mg/L	0.20	09/09/21 15:18	
EPA 6010D	Sodium	13.5	mg/L	1.0	09/09/21 15:18	
EPA 6010D	Calcium	10.6	mg/L	1.0	09/09/21 15:18	
EPA 6010D	Magnesium	9.0	mg/L	0.050	09/09/21 15:18	
EPA 6020B	Barium	0.049	mg/L	0.0050	09/09/21 16:59	
EPA 6020B	Beryllium	0.00019J	mg/L	0.00050	09/09/21 16:59	
EPA 6020B	Boron	1.3	mg/L	0.040	09/09/21 16:59	
EPA 6020B	Lithium	0.0026J	mg/L	0.030	09/09/21 16:59	
EPA 6020B	Selenium	0.032	mg/L	0.0050	09/09/21 16:59	
SM 2540C-2011	Total Dissolved Solids	141	mg/L	10.0	08/31/21 16:24	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	13.9	mg/L	5.0	09/03/21 19:15	
SM 2320B-2011	Alkalinity, Total as CaCO3	13.9	mg/L	5.0	09/03/21 19:15	
EPA 300.0 Rev 2.1 1993	Chloride	2.5	mg/L	1.0	09/01/21 22:14	
EPA 300.0 Rev 2.1 1993	Sulfate	68.0	mg/L	1.0	09/01/21 22:14	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Sample: YGWC-42 **Lab ID: 92557720001** Collected: 08/25/21 13:25 Received: 08/25/21 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/26/21 09:22		
pH	**6.73**	Std. Units			1		08/26/21 09:22		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**11.5**	mg/L	0.20	0.15	1	09/09/21 11:30	09/09/21 14:50	7440-09-7	M1
Sodium	**36.4**	mg/L	1.0	0.58	1	09/09/21 11:30	09/09/21 14:50	7440-23-5	M1
Calcium	**79.9**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 14:50	7440-70-2	M1
Magnesium	**80.9**	mg/L	0.050	0.012	1	09/09/21 11:30	09/09/21 14:50	7439-95-4	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 16:42	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:42	7440-38-2	
Barium	**0.027**	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 16:42	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 16:42	7440-41-7	
Boron	**13.5**	mg/L	0.40	0.086	10	09/09/21 11:00	09/10/21 10:46	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 16:42	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:42	7440-47-3	
Cobalt	**0.0014J**	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 16:42	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 16:42	7439-92-1	
Lithium	**0.053**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 16:42	7439-93-2	
Molybdenum	**0.00078J**	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 16:42	7439-98-7	
Selenium	**0.043**	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 16:42	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 16:33	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**886**	mg/L	20.0	20.0	1		08/28/21 16:49		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**38.5**	mg/L	5.0	5.0	1		09/03/21 19:02		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/03/21 19:02		
Alkalinity, Total as CaCO3	**38.5**	mg/L	5.0	5.0	1		09/03/21 19:02		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.4**	mg/L	1.0	0.60	1		09/01/21 21:29	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/01/21 21:29	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Sample: YGWC-42 **Lab ID: 92557720001** Collected: 08/25/21 13:25 Received: 08/25/21 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**500**	mg/L	11.0	5.5	11		09/02/21 20:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Sample: PZ-37 **Lab ID: 92557720002** Collected: 08/25/21 12:30 Received: 08/25/21 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/26/21 09:22		
pH	**5.48**	Std. Units			1		08/26/21 09:22		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**7.3**	mg/L	0.20	0.15	1	09/09/21 11:30	09/09/21 15:09	7440-09-7	
Sodium	**34.6**	mg/L	1.0	0.58	1	09/09/21 11:30	09/09/21 15:09	7440-23-5	
Calcium	**106**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 15:09	7440-70-2	
Magnesium	**53.1**	mg/L	0.050	0.012	1	09/09/21 11:30	09/09/21 15:09	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 16:48	7440-36-0	
Arsenic	**0.0014J**	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:48	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 16:48	7440-39-3	
Beryllium	**0.00059**	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 16:48	7440-41-7	
Boron	**10.3**	mg/L	0.40	0.086	10	09/09/21 11:00	09/10/21 10:52	7440-42-8	
Cadmium	**0.00094**	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 16:48	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:48	7440-47-3	
Cobalt	**0.0068**	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 16:48	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 16:48	7439-92-1	
Lithium	**0.023J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 16:48	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 16:48	7439-98-7	
Selenium	**0.20**	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 16:48	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 16:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**876**	mg/L	20.0	20.0	1		08/28/21 16:49		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**29.9**	mg/L	5.0	5.0	1		09/03/21 19:09		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/03/21 19:09		
Alkalinity, Total as CaCO3	**29.9**	mg/L	5.0	5.0	1		09/03/21 19:09		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.0**	mg/L	1.0	0.60	1		09/01/21 21:44	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/01/21 21:44	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Sample: PZ-37 **Lab ID: 92557720002** Collected: 08/25/21 12:30 Received: 08/25/21 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**472**	mg/L	11.0	5.5	11		09/02/21 20:41	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Sample: AMA-DUP-4 **Lab ID: 92557720003** Collected: 08/25/21 00:00 Received: 08/25/21 17:15 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								
Potassium	**7.5**	mg/L	0.20	0.15	1	09/09/21 11:30	09/09/21 15:14	7440-09-7	
Sodium	**35.3**	mg/L	1.0	0.58	1	09/09/21 11:30	09/09/21 15:14	7440-23-5	
Calcium	**108**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 15:14	7440-70-2	
Magnesium	**54.7**	mg/L	0.050	0.012	1	09/09/21 11:30	09/09/21 15:14	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 16:54	7440-36-0	
Arsenic	**0.0016J**	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:54	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 16:54	7440-39-3	
Beryllium	**0.00059**	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 16:54	7440-41-7	
Boron	**10.4**	mg/L	0.40	0.086	10	09/09/21 11:00	09/10/21 10:58	7440-42-8	
Cadmium	**0.00093**	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 16:54	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:54	7440-47-3	
Cobalt	**0.0060**	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 16:54	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 16:54	7439-92-1	
Lithium	**0.022J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 16:54	7439-93-2	
Molybdenum	**0.0011J**	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 16:54	7439-98-7	
Selenium	**0.20**	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 16:54	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 16:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**822**	mg/L	20.0	20.0	1		08/31/21 16:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**6.9**	mg/L	1.0	0.60	1		09/01/21 21:59	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/01/21 21:59	16984-48-8	
Sulfate	**470**	mg/L	11.0	5.5	11		09/02/21 20:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Sample: YGWC-23S **Lab ID: 92557720004** Collected: 08/25/21 15:10 Received: 08/25/21 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/26/21 09:22		
pH	**5.46**	Std. Units			1		08/26/21 09:22		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**1.1**	mg/L	0.20	0.15	1	09/09/21 11:30	09/09/21 15:18	7440-09-7	
Sodium	**13.5**	mg/L	1.0	0.58	1	09/09/21 11:30	09/09/21 15:18	7440-23-5	
Calcium	**10.6**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 15:18	7440-70-2	
Magnesium	**9.0**	mg/L	0.050	0.012	1	09/09/21 11:30	09/09/21 15:18	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 16:59	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:59	7440-38-2	
Barium	**0.049**	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 16:59	7440-39-3	
Beryllium	**0.00019J**	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 16:59	7440-41-7	
Boron	**1.3**	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 16:59	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 16:59	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 16:59	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 16:59	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 16:59	7439-92-1	
Lithium	**0.0026J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 16:59	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 16:59	7439-98-7	
Selenium	**0.032**	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 16:59	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 16:56	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**141**	mg/L	10.0	10.0	1		08/31/21 16:24		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**13.9**	mg/L	5.0	5.0	1		09/03/21 19:15		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/03/21 19:15		
Alkalinity, Total as CaCO3	**13.9**	mg/L	5.0	5.0	1		09/03/21 19:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.5**	mg/L	1.0	0.60	1		09/01/21 22:14	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/01/21 22:14	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Sample: YGWC-23S **Lab ID: 92557720004** Collected: 08/25/21 15:10 Received: 08/25/21 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**68.0**	mg/L	1.0	0.50	1		09/01/21 22:14	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

QC Batch: 645799
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720001, 92557720002, 92557720003, 92557720004

METHOD BLANK: 3387400 Matrix: Water
Associated Lab Samples: 92557720001, 92557720002, 92557720003, 92557720004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/09/21 14:40	
Magnesium	mg/L	ND	0.050	0.012	09/09/21 14:40	
Potassium	mg/L	ND	0.20	0.15	09/09/21 14:40	
Sodium	mg/L	ND	1.0	0.58	09/09/21 14:40	

LABORATORY CONTROL SAMPLE: 3387401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387402 3387403

Parameter	Units	92557720001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	79.9	1	1	78.2	78.5	-168	-139	75-125	0	20	M1
Magnesium	mg/L	80.9	1	1	79.7	80.4	-116	-50	75-125	1	20	M1
Potassium	mg/L	11.5	1	1	12.3	12.5	73	92	75-125	2	20	M1
Sodium	mg/L	36.4	1	1	36.7	37.2	28	79	75-125	1	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

QC Batch: 645800
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720001, 92557720002, 92557720003, 92557720004

METHOD BLANK: 3387411 Matrix: Water
Associated Lab Samples: 92557720001, 92557720002, 92557720003, 92557720004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/09/21 16:19	
Arsenic	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Barium	mg/L	ND	0.0050	0.00067	09/09/21 16:19	
Beryllium	mg/L	ND	0.00050	0.000054	09/09/21 16:19	
Boron	mg/L	ND	0.040	0.0086	09/09/21 16:19	
Cadmium	mg/L	ND	0.00050	0.00011	09/09/21 16:19	
Chromium	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Cobalt	mg/L	ND	0.0050	0.00039	09/09/21 16:19	
Lead	mg/L	ND	0.0010	0.00089	09/09/21 16:19	
Lithium	mg/L	ND	0.030	0.00073	09/09/21 16:19	
Molybdenum	mg/L	ND	0.010	0.00074	09/09/21 16:19	
Selenium	mg/L	ND	0.0050	0.0014	09/09/21 16:19	

LABORATORY CONTROL SAMPLE: 3387412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

Parameter	Units	92557720004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Barium	mg/L	0.049	0.1	0.1	0.15	0.15	102	102	75-125	0	20	
Beryllium	mg/L	0.00019J	0.1	0.1	0.10	0.095	101	95	75-125	6	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

Parameter	Units	92557720004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	1.3	1	1	2.1	2.1	85	78	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Lithium	mg/L	0.0026J	0.1	0.1	0.10	0.097	100	94	75-125	6	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20	
Selenium	mg/L	0.032	0.1	0.1	0.13	0.13	102	103	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

QC Batch: 646057
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720001, 92557720002, 92557720003, 92557720004

METHOD BLANK: 3388621 Matrix: Water
Associated Lab Samples: 92557720001, 92557720002, 92557720003, 92557720004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/09/21 16:28	

LABORATORY CONTROL SAMPLE: 3388622

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388623 3388624

Parameter	Units	92557720001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0022	98	88	75-125	12	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

QC Batch: 643691
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720001, 92557720002

METHOD BLANK: 3377302 Matrix: Water
Associated Lab Samples: 92557720001, 92557720002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/28/21 16:45	

LABORATORY CONTROL SAMPLE: 3377303

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	401	100	90-111	

SAMPLE DUPLICATE: 3377304

Parameter	Units	92557975004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	178	193	8	10	

SAMPLE DUPLICATE: 3377305

Parameter	Units	92555948046 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	604	656	8	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

QC Batch: 644073
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720003, 92557720004

METHOD BLANK: 3379366 Matrix: Water
Associated Lab Samples: 92557720003, 92557720004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:23	

LABORATORY CONTROL SAMPLE: 3379367

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	408	102	90-111	

SAMPLE DUPLICATE: 3379368

Parameter	Units	92557720003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	822	870	6	10	

SAMPLE DUPLICATE: 3379369

Parameter	Units	92555948054 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0	ND		10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

QC Batch: 645064
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92557720001, 92557720002, 92557720004

METHOD BLANK: 3384059 Matrix: Water
Associated Lab Samples: 92557720001, 92557720002, 92557720004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/03/21 17:19	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/03/21 17:19	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/03/21 17:19	

LABORATORY CONTROL SAMPLE: 3384060

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	53.4	107	80-120	

LABORATORY CONTROL SAMPLE: 3384061

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.5	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3384062 3384063

Parameter	Units	92555948049 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	128	50	50	176	176	97	97	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3384064 3384065

Parameter	Units	92557720004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	13.9	50	50	67.2	66.7	107	105	80-120	1	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

QC Batch: 644343
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: 92557720001, 92557720002, 92557720003, 92557720004

METHOD BLANK: 3380746 Matrix: Water
Associated Lab Samples: 92557720001, 92557720002, 92557720003, 92557720004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/01/21 20:14	
Fluoride	mg/L	ND	0.10	0.050	09/01/21 20:14	
Sulfate	mg/L	ND	1.0	0.50	09/01/21 20:14	

LABORATORY CONTROL SAMPLE: 3380747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	50.6	101	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	51.6	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3380748 3380749

Parameter	Units	92558521003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24700	50	50	5650	5930	-38100	-37500	90-110	5	10	M1
Fluoride	mg/L	ND	2.5	2.5	ND	ND	-160	-160	90-110		10	M1
Sulfate	mg/L	1050	50	50	274J	286J	-1550	-1530	90-110		10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3380750 3380751

Parameter	Units	92558347020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5790	50	50	5900	5860	213	142	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	ND	ND	0	0	90-110		10	M1
Sulfate	mg/L	609	50	50	666	657	113	96	90-110	1	10	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA-R6 DG
Pace Project No.: 92557720

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557720001	**YGWC-42**				
92557720002	**PZ-37**				
92557720004	**YGWC-23S**				
92557720001	**YGWC-42**	EPA 3010A	645799	EPA 6010D	646162
92557720002	**PZ-37**	EPA 3010A	645799	EPA 6010D	646162
92557720003	**AMA-DUP-4**	EPA 3010A	645799	EPA 6010D	646162
92557720004	**YGWC-23S**	EPA 3010A	645799	EPA 6010D	646162
92557720001	**YGWC-42**	EPA 3005A	645800	EPA 6020B	646175
92557720002	**PZ-37**	EPA 3005A	645800	EPA 6020B	646175
92557720003	**AMA-DUP-4**	EPA 3005A	645800	EPA 6020B	646175
92557720004	**YGWC-23S**	EPA 3005A	645800	EPA 6020B	646175
92557720001	**YGWC-42**	EPA 7470A	646057	EPA 7470A	646168
92557720002	**PZ-37**	EPA 7470A	646057	EPA 7470A	646168
92557720003	**AMA-DUP-4**	EPA 7470A	646057	EPA 7470A	646168
92557720004	**YGWC-23S**	EPA 7470A	646057	EPA 7470A	646168
92557720001	**YGWC-42**	SM 2540C-2011	643691		
92557720002	**PZ-37**	SM 2540C-2011	643691		
92557720003	**AMA-DUP-4**	SM 2540C-2011	644073		
92557720004	**YGWC-23S**	SM 2540C-2011	644073		
92557720001	**YGWC-42**	SM 2320B-2011	645064		
92557720002	**PZ-37**	SM 2320B-2011	645064		
92557720004	**YGWC-23S**	SM 2320B-2011	645064		
92557720001	**YGWC-42**	EPA 300.0 Rev 2.1 1993	644343		
92557720002	**PZ-37**	EPA 300.0 Rev 2.1 1993	644343		
92557720003	**AMA-DUP-4**	EPA 300.0 Rev 2.1 1993	644343		
92557720004	**YGWC-23S**	EPA 300.0 Rev 2.1 1993	644343		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #:

WO# : 92557720

92557720

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/25/21 COF

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 5.2 **Correction Factor: Add/Subtract (°C)** +0.1

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected [°C]: 5.1

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: ✓				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: **Date:**

Project Manager SRF Review: **Date:**

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

**Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, Hg

**Bottom half of box is to list number of bottles

Project # WO#:92557720

PM: HMG Due Date: 09/09/21

CLIENT: GA-GA Power

Sample	BP4U-125 mL Plastic Unpreserved (N/A) (CH)	BP3N-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP3U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic HNO3 (pH < 2) (CH)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CH)	BP4U-4 oz unpreserved glass per Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CH)	AG1H-1 liter Amber HCl (pH < 2)	AG4U-250 mL Amber Unpreserved (N/A)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG1M500ml-250 mL Amber NH4Cl (N/A) (CH)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NaTiO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9H-40 mL VOA H2SO4 (N/A)	VG9M (8 vials per MQ) MeOH 5035 kit (N/A)	VJ9M (3 vials per MQ) MeOH 5035 kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	EPN	BP1A-250 mL Plastic (NaOH)ZnOAc (9.5-9.7)	AG4U-500 mL Amber Unpreserved vials (N/A)	VG9U-20 mL ScintiVials vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1																								
2		1	1																								
3		1	1																								
4		2	1																								
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of 3

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-R6 DV
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency	
CCR	
State / Location	GA

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals	App. IV Metals (No Tl)	Radium 226/228 (9315/9320)	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)					Residual Chlorine (Y/N)	
1	YGWC-42	WT	G	8/25	1305				6										x	x	x	x	x	x	x	x						pH 6.73
2	YGWC-43	WT	G																x	x	x	x	x	x	x	x						pH
3	YAMW-2	WT	G																x	x	x	x	x			x						pH
4	~~YAMW-3~~	WT	G	8/25					3															x	x							pH
5	YAMW-4	WT	G																x	x	x	x	x	x	x	x						pH
6	YAMW-5	WT	G																x	x	x	x	x	x	x	x						pH
7	PZ-37	WT	G																x	x	x	x	x	x	x	x						pH
8	AMA-DUP-4	WT	G																x	x	x	x	x			x						pH
9	PZ-37D	WT	G																x	x	x	x	x	x	x	x						pH
10	YAMW-1	WT	G																x	x	x	x	x	x	x	x						pH
11	PZ-33	WT	G																x	x	x	x	x	x	x	x						pH
12		WT	G																													pH

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] Arcadis	8-25-21	1540	[signature]	8/25/21	1540				
App III Metals: Boron 6020B, Ca 6010D	[signature]	8/25/21	1715	[signature]	8/25/21	1730		Y	N	Y
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Pupkiewicz

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-25-21

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 3

Section A – Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B – Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-R6 Q/V
Project Number:	

Section C – Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10640

Regulatory Agency	CCR
State / Location	GA

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

SAMPLE ID: One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

ITEM #	SAMPLE ID	MATRIX CODE	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	TDS: 2450C	Anions Suite 300.0	App III Metals	App. IV Metals (No Tl)	Radium 226/228: 9315/9320	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)	Residual Chlorine (Y/N)	
1	YGWC-42	WT	G															x	x	x	x	x	x	x	x		pH
2	YGWC-43	WT	G															x	x	x	x	x	x	x	x		pH
3	YAMW-2	WT	G															x	x	x	x	x			x		pH
4	YAMW-3	WT	G																				x	x			pH
5	YAMW-4	WT	G		–													x	x	x	x	x	x	x	x		pH
6	YAMW-5	WT	G															x	x	x	x	x	x	x	x		pH
7	PZ-37	WT	G	8/25	12:30													x	x	x	x	x	x	x	x		pH 8.48
8	AMA-DUP-4	WT	G	8/25	–													x	x	x	x	x			x		pH 5.48
9	PZ-37D	WT	G															x	x	x	x	x	x	x	x		pH
10	YAMW-1	WT	G															x	x	x	x	x	x	x	x		pH
11	PZ-33	WT	G															x	x	x	x	x	x	x	x		pH
12		WT	G																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] Arcadis	8/25/21	1550	[signature]	8/25/21	1550				
App I Metals: Boron 6020B, Ca 6010D	[illegible]	8/25/21	1715	Charlie Fultz [signature]	8/25/21	1715	3.0	Y	N	Y
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/25/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 3

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-RE CV
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10640

Regulatory Agency	State / Location
CCR	GA

SAMPLE ID: One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

Sample Type: G=GRAB C=COMP

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS 2450C	Anions Sulfa 300.0	App III Metals	App IV Metals (Hg 7)	Radium 226/228 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)
1	AMA-ES-1	WT	G															x	x	x	x	x			-
2	AMA-ES-2	WT	G															x	x	x	x	x			-
3	AMA-FB-1	WT	G	8/25 [illegible]					5									x	x	x	x	x			-
4	AMA-FB-2	WT	G															x	x	x	x	x			-
5	YGWC-23S	WT	G	8/25	150				5									x	x	x	x	x	x	x	pH 5.46
6	YGWC-24SA	WT	G															x	x	x	x	x			pH
7	AMA-DUP-1	WT	G		-													x	x	x	x	x			pH
8	YGWC-36A	WT	G															x	x	x	x	x			pH
9	YGWC-49	WT	G															x	x	x	x	x	x	x	pH
10	YGWC-38	WT	G															x	x	x	x	x			pH
11	YGWC-41	WT	G															x	x	x	x	x	x	x	pH
12	AMA-DUP-2	WT	G		-													x	x	x	x	x			pH

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Sulfa 300.2 (Cl, F, Sulfate)	[signature] Arcadis	8/25/21	1550	[signature]	8/25/21	1550				
App III Metals: Boron 6020B, Ca 6010D	[signature]	8/25/21	1715	[signature]	8/25/21	1715	5.0	Y	N	Y
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)							TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [handwritten name]

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/25/21

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

October 01, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on August 25, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557719001	**YGWC-42**	Water	08/25/21 13:25	08/25/21 17:15
92557719002	**PZ-37**	Water	08/25/21 12:30	08/25/21 17:15
92557719003	**AMA-DUP-4**	Water	08/25/21 00:00	08/25/21 17:15
92557719004	**YGWC-23S**	Water	08/25/21 15:10	08/25/21 17:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92557719001	**YGWC-42**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92557719002	**PZ-37**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92557719003	**AMA-DUP-4**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92557719004	**YGWC-23S**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557719001	**YGWC-42**					
EPA 9315	Radium-226	0.213 ± 0.147 (0.222) C:90% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	0.765 ± 0.513 (0.974) C:73% T:86%	pCi/L		09/17/21 17:12	
Total Radium Calculation	Total Radium	0.978 ± 0.660 (1.20)	pCi/L		09/22/21 09:14	
92557719002	**PZ-37**					
EPA 9315	Radium-226	1.04 ± 0.306 (0.224) C:96% T:NA	pCi/L		09/21/21 08:06	
EPA 9320	Radium-228	0.371 ± 0.500 (1.07) C:70% T:83%	pCi/L		09/17/21 17:12	
Total Radium Calculation	Total Radium	1.41 ± 0.806 (1.29)	pCi/L		09/22/21 09:14	
92557719003	**AMA-DUP-4**					
EPA 9315	Radium-226	0.541 ± 0.221 (0.257) C:97% T:NA	pCi/L		09/21/21 09:38	
EPA 9320	Radium-228	0.733 ± 0.564 (1.11) C:71% T:85%	pCi/L		09/17/21 17:12	
Total Radium Calculation	Total Radium	1.27 ± 0.785 (1.37)	pCi/L		09/22/21 09:14	
92557719004	**YGWC-23S**					
EPA 9315	Radium-226	0.160 ± 0.133 (0.223) C:88% T:NA	pCi/L		09/21/21 09:38	
EPA 9320	Radium-228	0.464 ± 0.519 (1.09) C:73% T:88%	pCi/L		09/17/21 17:18	
Total Radium Calculation	Total Radium	0.624 ± 0.652 (1.31)	pCi/L		09/22/21 09:14	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Sample: YGWC-42 **Lab ID: 92557719001** Collected: 08/25/21 13:25 Received: 08/25/21 17:15 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	**0.213 ± 0.147 (0.222) C:90% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.765 ± 0.513 (0.974) C:73% T:86%**	pCi/L	09/17/21 17:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.978 ± 0.660 (1.20)**	pCi/L	09/22/21 09:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Sample: PZ-37 **Lab ID: 92557719002** Collected: 08/25/21 12:30 Received: 08/25/21 17:15 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	**1.04 ± 0.306 (0.224) C:96% T:NA**	pCi/L	09/21/21 08:06	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.371 ± 0.500 (1.07) C:70% T:83%**	pCi/L	09/17/21 17:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.41 ± 0.806 (1.29)**	pCi/L	09/22/21 09:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Sample: AMA-DUP-4 **Lab ID: 92557719003** Collected: 08/25/21 00:00 Received: 08/25/21 17:15 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	**0.541 ± 0.221 (0.257) C:97% T:NA**	pCi/L	09/21/21 09:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.733 ± 0.564 (1.11) C:71% T:85%**	pCi/L	09/17/21 17:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.27 ± 0.785 (1.37)**	pCi/L	09/22/21 09:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Sample: YGWC-23S **Lab ID: 92557719004** Collected: 08/25/21 15:10 Received: 08/25/21 17:15 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	**0.160 ± 0.133 (0.223) C:88% T:NA**	pCi/L	09/21/21 09:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.464 ± 0.519 (1.09) C:73% T:88%**	pCi/L	09/17/21 17:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.624 ± 0.652 (1.31)**	pCi/L	09/22/21 09:14	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

QC Batch: 463401 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92557719001, 92557719002, 92557719003, 92557719004

METHOD BLANK: 2237310 Matrix: Water
Associated Lab Samples: 92557719001, 92557719002, 92557719003, 92557719004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0856 ± 0.0647 (0.268) C:96% T:NA	pCi/L	09/20/21 15:28	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

QC Batch: 463398
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92557719001, 92557719002, 92557719003, 92557719004

METHOD BLANK: 2237303 Matrix: Water
Associated Lab Samples: 92557719001, 92557719002, 92557719003, 92557719004

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.384 ± 0.355 (0.721) C:77% T:80%	pCi/L	09/17/21 14:10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA-R6 DG RADS
Pace Project No.: 92557719

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557719001	**YGWC-42**	EPA 9315	463401		
92557719002	**PZ-37**	EPA 9315	463401		
92557719003	**AMA-DUP-4**	EPA 9315	463401		
92557719004	**YGWC-23S**	EPA 9315	463401		
92557719001	**YGWC-42**	EPA 9320	463398		
92557719002	**PZ-37**	EPA 9320	463398		
92557719003	**AMA-DUP-4**	EPA 9320	463398		
92557719004	**YGWC-23S**	EPA 9320	463398		
92557719001	**YGWC-42**	Total Radium Calculation	464986		
92557719002	**PZ-37**	Total Radium Calculation	464986		
92557719003	**AMA-DUP-4**	Total Radium Calculation	464986		
92557719004	**YGWC-23S**	Total Radium Calculation	464986		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92557719**

92557719

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Pace ☐ Other: ☑ Client

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/25/21 COF

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 5.0 Correction Factor: Add/Subtract (°C): +0.1

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 5.1

☐ 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:	✓			
Headspace in VOA Vials (>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, Lachat

**Bottom half of box is to list number of bottles

Project #

WO# : 92557719

PM: NMG Due Date: 09/18/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CH)	BP3N-250 mL Plastic Unpreserved (N/A)	BP1U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic H2SO4 (pH < 2) (CH)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CH)	BP4B-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CH)	AG1H-1 liter Amber HCl (pH < 2)	AG5U-250 mL Amber Unpreserved (N/A) (CH)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG5S-250 mL Amber H2SO4 (pH < 2)	AG5M(DOE)-250 mL Amber NH4Cl (N/A)(CH)	DG9H-40 mL VOA HCl (N/A)	VORT-40 mL VOA Na2S2O3 (N/A)	VORU-40 mL VOA Unp (N/A)	DG9R-40 mL VOA H2SO4 (N/A)	VOAM (5 vials per MeOH kit) (N/A)	VSG9 (3 vials per kit)-VOA/Gas kit (N/A)	BP3T-125 mL Sterile Plastic (N/A - lab)	BP3T-250 mL Sterile Plastic (N/A - lab)	ESP IN	BP3A-250 mL Plastic (NaO)2S2O3 (0.3-0.5)	AG0U-100 mL Amber Unpreserved vials (N/A)	WGKU-20 mL Scintillation vials (N/A)	DG9Q-40 mL Amber Unpreserved vials (N/A)
1		2	1			1																						
2		1	1			1																						
3		1	1			1																						
4		2	1			1																						
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of th s 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 3

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-RII
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole DiGeo
Pace Profile #:	10640

Regulatory Agency: GDR

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test Y/N	TDS 2540C	Arsenic (EPA 300.0)	App III Metals	App. IV Metals (Pro Fl)	Radium 226/228 (9315/9320)	Alkalinity (2320B)	Calcium (Ma, K, Mg, Cn)	Mercury (7470A)	Residual Chlorine (Y/N)	
1	YGWC-4C	WT	G	8/25	1355			6										X	X	X	X	X	X	X	X	
2	YGWC-4D	WT	G															X	X	X	X	X	X	X	X	
3	YMW-2	WT	G															X	X	X	X	X			X	
4	[illegible]	WT	G	8/25				3															X	X		
5	YMW-4	WT	G															X	X	X	X	X	X	X	X	
6	YMW-5	WT	G															X	X	X	X	X	X	X	X	
7	YC-07	WT	G															X	X	X	X	X	X	X	X	
8	YMW-DUP-4	WT	G															X	X	X	X	X			X	
9	YC-DPD	WT	G															X	X	X	X	X	X	X	X	
10	YMW-7	WT	G															X	X	X	X	X	X	X	X	
11	YC-08	WT	G															X	X	X	X	X	X	X	X	
12		WT	G																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Arsenic Suite 300.0 (Cl, F, Sulfate)	[signature] (Arcadis)	8-25-21	1540	[signature]	8/25/21	1540	
App I Metals: Boron (6020), Ca (6010)	[signature]	8-25-21	17:15	[signature]	8/25/21	1715	ISO Y N Y
App IV Metals (6020): Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Hattie Professor

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-25-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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Page : 2 of 3

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Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-R6 Qtr
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency	
CCR	
State / Location	GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	TDS: 2450C	Anions Suite 300.0	App III Metals	App. IV Metals (No Tl)	Radium 226/228: 9315/9320	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)	Residual Chlorine (Y/N)	
1	YGWC-42	WT	G					x	x	x	x	x	x	x	x		pH:
2	YGWC-43	WT	G					x	x	x	x	x	x	x	x		pH:
3	YAMW-2	WT	G					x	x	x	x	x			x		pH:
4	YAMW-3	WT	G										x	x			pH:
5	YAMW-4	WT	G					x	x	x	x	x	x	x	x		pH:
6	YAMW-5	WT	G					x	x	x	x	x	x	x	x		pH:
7	PZ-37	WT	G	8/25	1230			x	x	x	x	x	x	x	x		pH: 5.48
8	AMA-DUP-4	WT	G	8/25	–			x	x	x	x	x			x		pH: 5.48
9	PZ-37D	WT	G					x	x	x	x	x	x	x	x		pH:
10	YAMW-1	WT	G					x	x	x	x	x	x	x	x		pH:
11	PZ-35	WT	G					x	x	x	x	x	x	x	x		pH:
12		WT	G														

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

Sample ID: One character per box. (A-Z, 0-9 / , -) Sample IDs must be unique.

Columns with no entries on this page: Sample Temp at Collection; # of Containers; Preservatives (Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other); Analyses Test Y/N; 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	8/25/21	1550	[signature]	8/25/21	1550	
App III Metals: Boron 6020B; Ca 6010D	[signature]	8/25/21	1715	Charlie Fultz [signature]	8/25/21	1715	3.0 / Y / N / Y
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/25/21

Sample conditions columns: TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 3 of 3

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Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-RS "Day"
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10640

Regulatory Agency
CCR
State / Location
GA

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (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	TDS 2450C	Anions Suite 300.0	App III Metals	App IV Metals (No Tl)	Radium 226/228 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)	
1	AMA-EB-1	WT	G															x	x	x	x	x				–
2	AMA-EB-2	WT	G															x	x	x	x	x				–
3	AMA-FB-1	WT	G	8/25					5									x	x	x	x	x				–
4	AMA-FB-2	WT	G															x	x	x	x	x				–
5	YGWC-23S	WT	G	8/25	1150				5									x	x	x	x	x	x	x		pH 5.46
6	YGWC-24SA	WT	G															x	x	x	x	x				pH
7	AMA-DUP-1	WT	G		–													x	x	x	x	x				pH
8	YGWC-36A	WT	G															x	x	x	x	x	x	x		pH
9	YGWC-49	WT	G															x	x	x	x	x				pH
10	YGWC-38	WT	G															x	x	x	x	x	x	x		pH
11	YGWC-41	WT	G															x	x	x	x	x	x	x		pH
12	AMA-DUP-2	WT	G		–													x	x	x	x	x				pH

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] / Arcadis	8/25/21	1530	[signature]	8/25/21	1530				
App III Metals: Boron 6020B, Ca 6010D	[signature]	8/25/21	1715	[signature]	8/25/21	1715	5.0	Y	N	Y
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)										

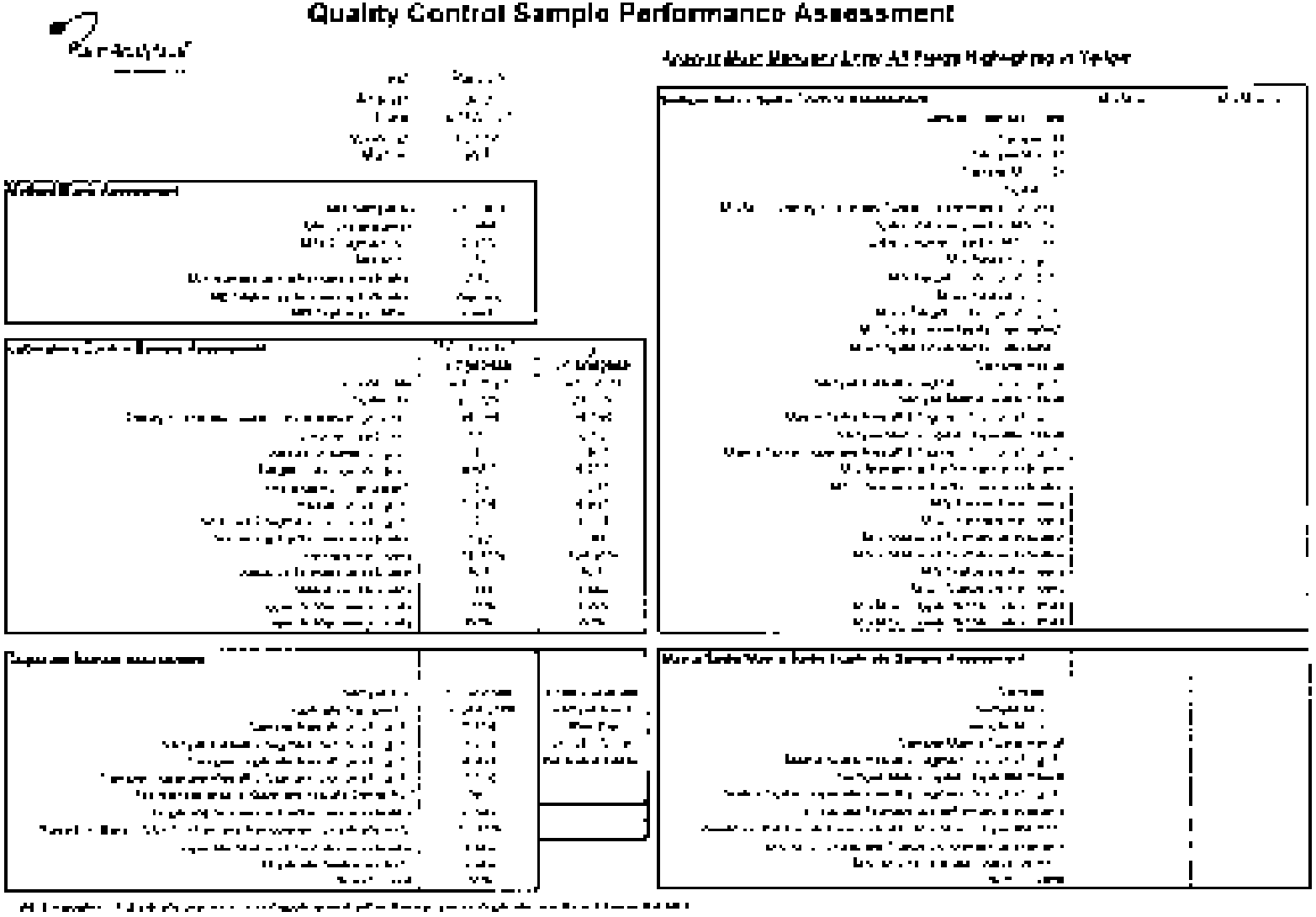
SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Pokrzywinski / Jake Simpson

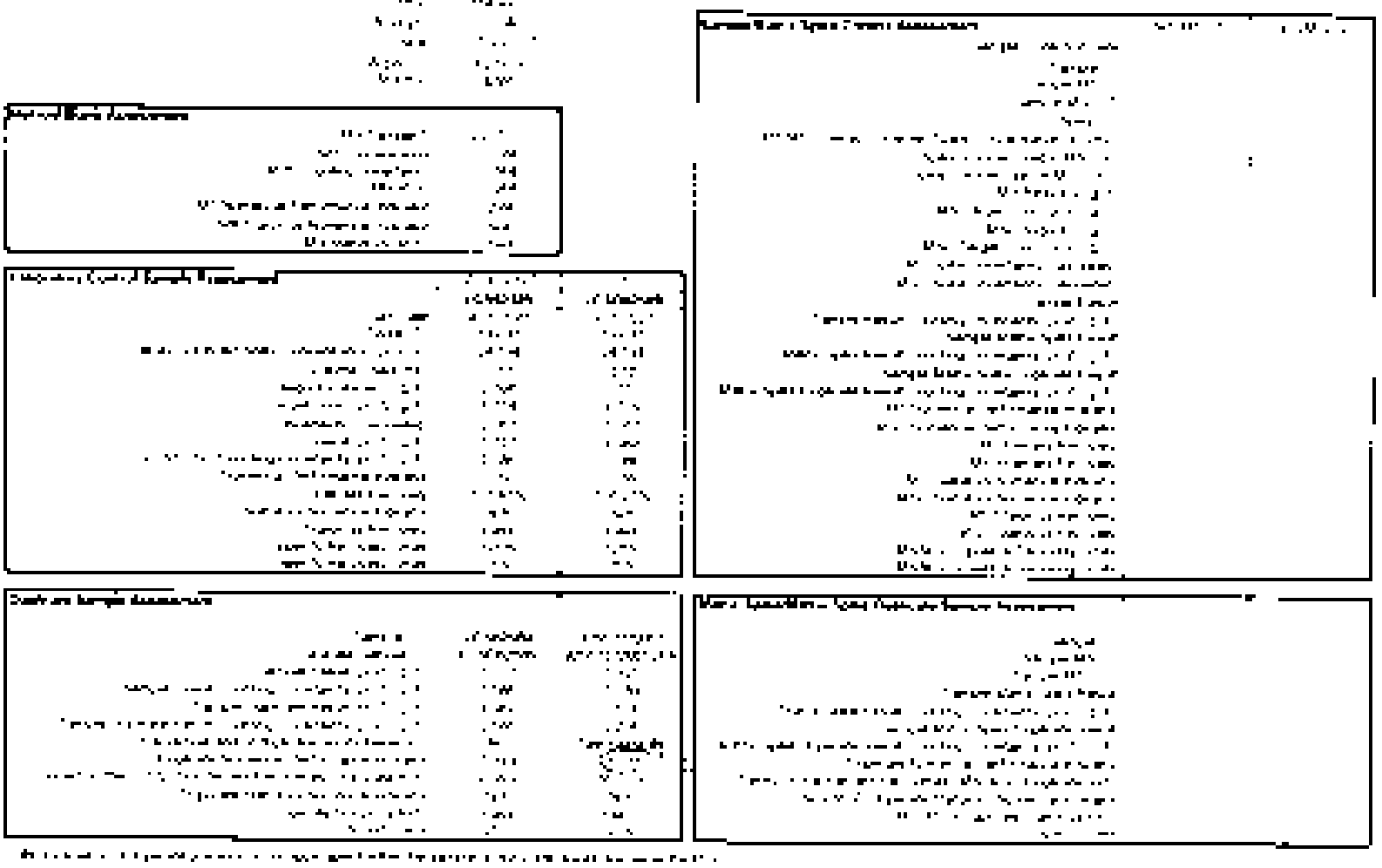
SIGNATURE of SAMPLER: [signature] DATE Signed: 8/25/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Georgia Power Co. – Plant Yates

Data Review Report

Metals, Radium, and General Chemistry Analyses

SDGs #92557070 and 92557089

Analyses Performed By:
Pace Analytical Services – Asheville, North Carolina
Pace Analytical Services – Peachtree Corners, Georgia
Pace Analytical Services – Greensburg, Pennsylvania

Report #43277R
Review Level: Tier II
Project: 30052922.00004

Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92557070 and 92557089 for samples collected in association with the Georgia Power Company – Plant Yates. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the chain of custody form and a table summarizing the data validation qualifiers. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
UP-DUP-1	92557070001 92557089001	Water	8/20/2021	GWA-2	X	X	X
GWA-2	92557070002 92557089002	Water	8/20/2021		X	X	X
YGWA-14S	92557070003 92557089003	Water	8/19/2021		X	X	X
UP-DUP-2	92557070004 92557089004	Water	8/19/2021	YGWA-14S	X	X	X
YGWA-1D	92557070005 92557089005	Water	8/19/2021		X	X	X
YGWA-1I	92557070006 92557089006	Water	8/19/2021		X	X	X
YGWA-3D	92557070007 92557089007	Water	8/19/2021		X	X	X
YGWA-47	92557070008 92557089008	Water	8/19/2021		X	X	X
YGWA-30I	92557070009 92557089009	Water	8/19/2021		X	X	X
YGWA-39	92557719005 92557720005	Water	8/26/2021		X	X	X
UP-FB-2	92558240001 92558254001	Water	8/26/2021		X	X	X
YGWA-4I	92558240002 92558254002	Water	8/26/2021		X	X	X

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
					RAD	MET	GEN CHEM
YGWA-5I	92558240003 92558254003	Water	8/26/2021		X	X	X
UP-DUP-3	92558240004 92558254004	Water	8/26/2021	YGWA-5I	X	X	X
YGWA-5D	92558240005 92558254005	Water	8/26/2021		X	X	X
YGWA-17S	92558240006 92558254006	Water	8/27/2021		X	X	X
YGWA-18S	92558240007 92558254007	Water	8/26/2021		X	X	X
YGWA-18I	92558240008 92558254008	Water	8/27/2021		X	X	X
YGWA-20S	92558240009 92558254009	Water	8/27/2021		X	X	X
YGWA-21I	92558240014 92558254014	Water	9/1/2021		X	X	X
YGWA-40	92559523001 92559527001	Water	9/3/2021		X	X	X
YGWA-2I	92558238001 92558251001	Water	8/27/2021		X	X	X
YGWA-3I	92558238002 92558251002	Water	8/27/2021		X	X	X

Notes:

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia.
2. Anions (chloride, fluoride, and sulfate) and alkalinity analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA = quality assurance

Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B, SM2540C, and SM2320B; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Mercury Data by Cold Vapor Atomic Absorption (September 2011, Rev. 2), and the National Functional Guidelines for Inorganic Superfund Methods Data Review (January 2017).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - * Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if

it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Metals Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Metals were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

The MS/MSD analysis performed using sample YGWA-2I in association with SW-846 6010D analysis. The concentration of calcium in the unspiked sample was greater than four-times the amount of spike added; hence the recoveries were not evaluated, and no qualification of the results was required.

The MS/MSD analysis performed using sample YGWA-4I in association with SW-846 6010D analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed using sample YGWA-5D in association with SW-846 6020B analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed using sample UP-FB-2 in association with SW-846 6010D and SW-846 7470A analysis exhibited recoveries within the control limits.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPDs.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWA-2 / UP-DUP-1	Calcium	26.5	26.0	1.9%
	Barium	0.036	0.033	8.7%
	Cobalt	0.074	0.065	12.9%
	Copper	0.0012 J	0.00087 J	AC
	Lithium	0.0028 J	0.0027 J	
	Nickel	0.014	0.013	
	Zinc	0.014	0.012	
YGWA-14S / UP-DUP-2	Calcium	1.2	1.3	AC
	Barium	0.0077	0.0080	
	Beryllium	0.00022 J	0.00020 J	
	Boron	0.018 J	0.017 J	

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
YGWA-5I / UP-DUP-3	Calcium	2.5	2.5	AC
	Barium	0.019	0.018	
	Lithium	0.0032 J	0.0031 J	

Note:
AC = Acceptable

The differences in the results between the parent sample GWA-2 and field duplicate sample UP-DUP-1 were acceptable.

The differences in the results between the parent sample YGWA-14S and field duplicate sample UP-DUP-2 were acceptable.

The differences in the results between the parent sample YGWI-5I and field duplicate sample UP-DUP-3 were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for Metals

METALS: SW-846 6010D/6020B/7470A	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES) Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

General Chemistry Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids (TDS) by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Alkalinity by SM2320B	Water	14 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed using sample YGWA-40 in association with alkalinity analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed using sample UP-DUP-2 in association with anions analysis exhibited recoveries within the control limits.

The MS/MSD analysis performed on sample locations YGWA-2A and YGWA-2S in association with anions analysis exhibited recoveries outside of the acceptance limits as presented in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
YGWA-2A	Chloride	> 125%	> 125%
	Fluoride		
	Sulfate		
YGWA-20S	Chloride	> 125%	> 125%
	Fluoride		
	Sulfate		

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

The laboratory duplicate analysis performed using samples YGWA-47, YGWA-5D, and YGWA-2I in association with TDS analysis exhibited an RPD within the control limit.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis in association with alkalinity and anions. The MS/MSD recoveries exhibited acceptable RPDs.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWA-2 / UP-DUP-1	TDS	254	245	3.6%
	Chloride	5.2	5.2	0.0%
	Fluoride	0.060 J	0.079 J	AC
	Sulfate	121	120	0.8%
YGWA-14S / UP-DUP-2	TDS	54.0	55.0	1.8%
	Chloride	5.0	5.0	AC
	Sulfate	6.7	6.7	0.0%
YGWA-5I / UP-DUP-3	TDS	86.0	80.0	7.2%
	Chloride	4.3	4.3	AC
	Sulfate	2.4	2.5	

Note:
AC = Acceptable

The differences in the results between the parent sample GWA-2 and field duplicate sample UP-DUP-1 were acceptable.

The differences in the results between the parent sample YGWA-14S and field duplicate sample UP-DUP-2 were acceptable.

The differences in the results between the parent sample YGWI-5I and field duplicate sample UP-DUP-3 were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for General Chemistry

General Chemistry: SM4500-H+ B, SM2540C, SM2320B, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

Radiological Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits (±2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

Note:
* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228, Radium-226, and total Radium were detected in the QA blanks, however, the activities were measured as less than the uncertainty and MDC or between the uncertainty and MDC as described above. Hence, the blank results are considered non-detect and no qualification of the results was required.

3. Matrix Spike (MS)/Laboratory Duplicate Analysis

MS and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS Analysis

MS samples are not typically analyzed for gamma spectral content due to the inability of the laboratory to homogenize spike material with the sample.

If performed, the spike analysis must exhibit a percent recovery within the control limits of 70% to 130%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits.

In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of < ±3 sigma for either.

The numerical performance indicator for a matrix spike sample is calculated by:

$$Z_{MS} = \frac{x - x_0 - c}{\sqrt{u^2(x) + u^2(x_0) + u^2(c)}}$$

Where:

x = measured concentration of the spiked sample.

x_0 = measured concentration of the unspiked sample.

c = spike concentration added.

$u^2(x)$, $u^2(x0)$, $u^2(c)$ = the squares of the respective standard uncertainties of these values.

MS performance for all matrices is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

MS analysis was not performed using a sample from this SDG.

3.2 Laboratory Duplicate Analysis

Duplicate analyses are indicators of laboratory precision based on each sample matrix. For replicate analysis results to be considered in agreement the duplicate error ratio (DER) must be less than 2.13. In the event the DER is outside of the limit of 2.13, a numerical indicator to make assessments is calculated, with a limit of ±3 sigma or standard deviation.

The numerical performance indicator for laboratory duplicates is calculated by:

Where:

x_1, x_2 = two measured activity concentrations.

$u^2(x_1)$, $u^2(x_2)$ = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

Laboratory duplicate analysis was performed using sample UP-DUP-1 in association with SW-846 9315 analysis. Since the activities were less than the MDC in the parent sample and laboratory duplicate sample, the evaluation of the laboratory duplicate samples is not applicable.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in soil matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

The field duplicate sample results are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
GWA-2 / UP-DUP-1	Radium-226	0.0454 ± 0.104	0.325 ± 0.195	AC
	Radium-228	0.483 ± 0.364	0.333 ± 0.342	
	Total Radium	0.528 ± 0.468	0.658 ± 0.537	
YGWA-14S / UP-DUP-2	Radium-226	0.00466 ± 0.157	0.111 ± 0.167	AC
	Radium-228	0.781 ± 0.436	1.08 ± 0.491	

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
	Total Radium	0.786 ± 0.593	1.19 ± 0.658	
YGWI-5I / UP-DUP-3	Radium-226	0.173 ± 0.181	0.101 ± 0.197	AC
	Radium-228	0.625 ± 0.402	0.620 ± 0.425	
	Total Radium	0.798 ± 0.583	0.721 ± 0.622	

Note:
AC = Acceptable

The differences in the results between the parent sample GWA-2 and field duplicate sample UP-DUP-1 were acceptable.

The differences in the results between the parent sample YGWA-14S and field duplicate sample UP-DUP-2 were acceptable.

The differences in the results between the parent sample YGWI-5I and field duplicate sample UP-DUP-3 were acceptable.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated

by:

$$Z_{LCS} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$ = combined standard uncertainty of the result squared.

$u^2(c)$ = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria sample results should be considered non-detect as follows:

- GWA-2, YGWA-1I, YGWA-47, YGWA-30I, UP-FB-2, YGWA-5I, UP-DUP-3, YGWA-18S, YGWA-18I, and YGWA-2I – Radium-226, Radium-228, and total Radium
- YGWA-14S and YGWA-1D – Radium-226 and total Radium
- UP-DUP-1, YGWA-39, YGWA-4I, YGWA-17S, YGWA-20S, and YGWA-40 – Radium-228 and total Radium
- UP-DUP-2 – Radium-226
- YGWA-3I – Radium-228

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for Radiologicals

Radiologicals: SW-846 9315/9320	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding Times		X		X	
Activity, +/- uncertainty, MDC/MDA		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks		X		X	
Carrier (Surrogate) %R		X		X	
Tracer (Surrogate) %R		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R		X		X	
LCS/LCSD Precision (RPD)		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)		X		X	
Field Duplicate (RPD)		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: 

DATE: November 23, 2021

PEER REVIEW: Dennis Capria

DATE: December 2, 2021

Chain of Custody / Data Qualifier Summary Table

CHAIN-OF-CUSTODY / Analytical Request Document

Page: 1 of [illegible]

Section A – Required Client Information

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Requested Due Date:	10 Day

Section B – Required Project Information

Report To:	SCS Contacts
Copy To:	Arcadis Contacts

Section C – Invoice Information

Attention:	Southern Co.

SAMPLE ID

ITEM #	SAMPLE ID				
1	[illegible]	[illegible]	—		5.86
2	[illegible]	[illegible]	[illegible]		5.56
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
[illegible]	[signature]	[illegible]	[illegible]	[signature]	[illegible]	[illegible]	[illegible]	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature]

DATE Signed: [illegible]

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain-of-custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Section A
Required Client Information

Section B
Required Project Information

Section C
Invoice Information

Page: 2 of 11

Regulatory Agency

State / Location

ITEM #	SAMPLE ID	MATRIX	COLLECTED DATE	COLLECTED TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyses Test	Requested Analysis Filtered (Y/N)								Residual Chlorine (Y/N)	
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 4

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power	Report To: SCS Contacts	Attention: Southnet Co
Address: Atlanta, GA	Copy To: Arcadis Contacts	Company Name:
	Purchase Order #	Address:
Email To: SCS and Arcadis Contacts	Project Name:	Pace Quote:
Phone: Fax:	Project Number: 1[illegible]	Pace Project Manager: Kevin Henning Nicole Dolce
Requested Due Date: 10 Day		Pace Profile #: 1[illegible]

Regulatory Agency: CCR; State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9, -). Sample IDs Must Be Unique)	SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Bioassay BT, Other OT)	COLLECTED Start Date	COLLECTED Start Time	COLLECTED End Date	COLLECTED End Time	SAMPLE TEMP AT COLLECTION	Preservatives: # OF CONTAINERS, Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other	Analyses Test	Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	[illegible]												
2	[illegible]												
3	[illegible]												
4	[illegible]												
5	YGWA-1D		SL	8/1	1410								6.32
6	YGWA-1S		SL	8/1	1245								6.38
7	YGWA-3D		SL	8/1	1446								5.34
8	[illegible]												
9	[illegible]												
10	[illegible]		SL	8/20	1424								
11	[illegible]												
12	[illegible]		SL	8/20	1433								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	8/20	1730	[illegible]	[illegible]	[illegible]	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Crosse

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/20/12

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 4 of 4

Section A — Required Client Information		Section B — Required Project Information		Section C — Invoice Information	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	[redacted] [illegible]	Pace Project Manager:	[illegible]
Requested Due Date:	10 Day	Project Number:		Pace Profile #:	[illegible]

Regulatory Agency
CCR
State / Location
GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	Preservatives	Requested Analysis	Residual Chlorine (Y/N)	
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	X X	[illegible]		5.50
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A – Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B – Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-R6 (downgradient)
Project Number:	

Section C – Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Page: Of

Regulatory Agency
EPD
State / Location
GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	TIME	END DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)
1	[illegible]	WT	G																	
2	[illegible]	WT	G	8/26/21	[illegible]					2		3							x x x x x x x	pH
3	[illegible]	WT	G																x x x x x x x	pH 6.91
4		WT	G																x x x x x x x	pH
5		WT	G																	
6		WT	G																	
7		WT	G																	
8		WT	G																	
9		WT	G																	
10		WT	G																	
11		WT	G																	
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature]	8/26/21	1410	[signature]	8/26	1410	
App II Metals: Boron 6020, Ca 6010		8/27	1640	[signature]	8/27	1640	
App IV Metals 6020: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Rakowicz

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-26-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of

Section A — Required Client Information:

Company	Georgia Power
Address	Atlanta, GA
Email To	SCS and Arcadis Contacts
Phone	Fax
Requested Due Date	10 Day

Section B — Required Project Information:

Report To	SCS Contacts
Copy To	Arcadis Contacts
Purchase Order #	
Project Name	Yates AP-2 (upgradient)
Project Number	

Section C — Invoice Information:

Attention	Southern Co.
Company Name	
Address	
Pace Quote	
Pace Project Manager	Kevin Herring/Nicole D'Oleo
Pace Profile #	10840

Regulatory Agency
DCR
State / Location
GA

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start Date	Collected Start Time	Collected End Date	Collected End Time	Sample Temp at Collection	# of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
	YGWA-3I	WG		[illegible]	1033			[illegible]	[illegible]	X		X							x x x x x		pH [illegible]
	YGWA-3I	WG		[illegible]	[illegible]			[illegible]	[illegible]	X		X							x x x x x		pH [illegible]

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature] / Arcadis	[illegible]	[illegible]	[signature]	8/27	[illegible]	
App III Metals: Boron 6020B, Ca 6010D	[signature]	8/27	1040	[signature]	[illegible]	[illegible]	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Cheap

SIGNATURE of SAMPLER: [signature]

DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A — Required Client Information:
Company: Acuity (GA Power)
Address: 3000 Pace's Ferry Rd
Suite 900, Atlanta, GA 30339
Email:
Phone: Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Sonny Stalvey
Copy To:
Purchase Order #:
Project Name: Yates Ash
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: mindi.dyer@pacelabs.com
Pace Profile #: 10842

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (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 TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	O.T. 504	App 304/Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	ABA-ES-1	WT																							
2	ABA-ES-2	WT																							
3	ABA-PS-1	WT																							
4	ABA-PS-2	WT																							
5	UP-ES-1	WT																							
6	UP-PS-1	WT	5/24	7:10					5	X		X													
7	[illegible]	WT																							
8	UP-PS-2	WT																							
9	YDWA-01	WT	5/24	8:45					5	X		X												5.62	
10	YDWA-02	WT	5/24	11:28					5	X		X												551 SU	
11	UP-DUP-1	WT	5/24	-					5	X		X												-	
12	YDWA-03	WT	5/24	13:35					5	X		X												7.16 SU	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	5/24	1440	[signature]	5/24	1440	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Mark Chet
SIGNATURE of SAMPLER: [signature] DATE Signed: 5/27/21

TEMP in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 Of 2

Section A – Required Client Information:	Section B – Required Project Information:	Section C – Invoice Information:
Company: Arcadis (GA Power)	Report To: Becky Steever	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates Ash	Pace Project Manager: [illegible]@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency:

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start Date	Collected Start Time	Collected End Date	Collected End Time	Sample Temp at Collection	# of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses Test	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1045				5	✓		✓							X	X	X	X			Ph: 5.27
14	~~[illegible]~~ YGWA-18S	WT		8/28	1535				5	✓		✓							X	X	X	X			Ph: 4.40
15	YGWA-18I	WT		8/27	0945				5	✓		✓							X	X	X	X			Ph: 5.80
16	YGWA-20S	WT		8/27	1310				5	✓		✓							X	X	X	X			Ph: 5.57
17	YGWA-21I	WT																	X	X	X	X			
18	YGWC-23S	WT																	X	X	X	X	X		
19	YGWC-24SA	WT																	X	X	X	X			
20	AMA-DUP-1	WT																	X	X	X	X			
21	YGWC-36A	WT																	X	X	X	X	X		
22	YGWC-49	WT																	X	X	X	X			
23	AMA-EB-1			8/26	1800				5										X	X	X	X			
24	AMA-EB-2			8/27	1340				5										X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Arcadis	8/27		[signature]	8/27	1840	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: Of

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	~~[illegible]~~ [illegible]
Copy To:	~~[illegible]~~
Purchase Order #:	
Project Name:	[illegible]
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency	CCR
State / Location	GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	# OF CONTAINERS	Unpreserved	HNO_3	Requested Analysis	Residual Chlorine (Y/N)
1	[illegible]	WT	G							
2	[illegible]	WT	G							
3	[illegible]	WT	G							
4	[illegible]	WT	G							
5	[illegible]	WT	G							
6	[illegible]	WT	G							
7	[illegible]	WT	G		–					
8	[illegible]	WT	G							
9	[illegible]	WT	G							
10	ARA-DUP-1	WT	G	9/1	–	5	✓	✓	[illegible]	
11	YGWC-25A	WT	G	9/1	1025	5	✓	✓✓	[illegible]	pH 5.22
12	YGWA-21I	WT	G	9/1	1140	5	✓	✓		pH 6.65

Requested Analysis Filtered (Y/N): TDS (2540), Anions (Sulfate 300.0), App III Metals, App. IV Metals (All 11), Radium 226/228, Alkalinity, Cations (Fe, K, Mg, Ca, Na)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Sulfate 300.0 (D.F. sulfate)	[signature] / Arcadis	9/2/21	1530	[signature] / Arcadis	9/2/21	1530	
App II Metals: Boron 6020B Ca 6010D	[signature]	9/2/21	1702	[signature] / Pace	9/2/21	1702	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Suhayan

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 1

Section A – Required Client Information:

Company:	Arcadis (GA Power)
Address:	2839 Paces Ferry Rd
	Suite 900, Atlanta, GA 30339
Email:	
Phone:	Fax:
Requested Due Date:	

Section B – Required Project Information:

Report To:	[illegible]
Copy To:	
Purchase Order #:	
Project Name:	Yates R6
Project #:	

Section C – Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	[illegible]@pacelabs.com
Pace Profile #:	10840

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	TIME	END DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	[illegible]	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	[illegible]	WT																	x	x		x	x	x		
2	[illegible]	WT		[illegible]															x	x		x	x	x		4.5
3	[illegible]	WT																	x	x		x	x	x		
4	[illegible]	WT																	x	x		x	x	x		
5	[illegible]	WT																	x	x			x			
6	[illegible]	WT																	x	x		x	x	x		
7	[illegible]	WT																	x	x		x	x	x		
8	[illegible]	WT																			x					
9	[illegible]	WT																			x					
10	[illegible]	WT																			x					
11	[illegible]	WT																			x					
12	[illegible]	WT																			x					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / Arcadis	9/3/21	1730	[signature] / Pace	9/3/21	1735	4.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible] Chest

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/3/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92557070	No qualifiers assigned						
92557089	YGWA-2I	EPA 300.0	Chloride	0.99	mg/L	J	MS %R > UCL, MSD %R >UCL
			Fluoride	0.12	mg/L	J	MS %R > UCL, MSD %R >UCL
			Sulfate	16.7	mg/L	J	MS %R > UCL, MSD %R >UCL
	YGWA-20S	EPA 300.0	Chloride	2.8	mg/L	J	MS %R > UCL, MSD %R >UCL

Abbreviations:
%R = percent recovery
mg/L = milligrams per liter
MS = matrix spike
MSD = metrix spike duplicate
UCL = upper control limit

Qualifiers:
J = estimated result

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

October 12, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES UPGRADIENT
Pace Project No.: 92557089

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 20, 2021 and September 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tyler Forney for
Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557089001	**UP-DUP-1**	Water	08/20/21 00:00	08/20/21 17:30
92557089002	**GWA-2**	Water	08/20/21 12:00	08/20/21 17:30
92557089003	**YGWA-14S**	Water	08/19/21 11:00	08/20/21 17:30
92557089004	**UP-DUP-2**	Water	08/19/21 00:00	08/20/21 17:30
92557089005	**YGWA-1D**	Water	08/19/21 11:10	08/20/21 17:30
92557089006	**YGWA-1I**	Water	08/19/21 12:49	08/20/21 17:30
92557089007	**YGWA-3D**	Water	08/19/21 14:45	08/20/21 17:30
92557089008	**YGWA-47**	Water	08/19/21 10:26	08/20/21 17:30
92557089009	**YGWA-30I**	Water	08/19/21 12:20	08/20/21 17:30
92557720005	**YGWA-39**	Water	08/26/21 12:30	08/27/21 16:40
92558251001	**YGWA-2I**	Water	08/27/21 11:33	08/27/21 16:40
92558251002	**YGWA-3I**	Water	08/27/21 09:55	08/27/21 16:40
92558254001	**UP-FB-2**	Water	08/26/21 17:10	08/27/21 16:40
92558254002	**YGWA-4I**	Water	08/26/21 11:29	08/27/21 16:40
92558254003	**YGWA-5I**	Water	08/26/21 16:28	08/27/21 16:40
92558254004	**UP-DUP-3**	Water	08/26/21 00:00	08/27/21 16:40
92558254005	**YGWA-5D**	Water	08/26/21 13:35	08/27/21 16:40
92558254006	**YGWA-17S**	Water	08/27/21 10:45	08/27/21 16:40
92558254007	**YGWA-18S**	Water	08/26/21 15:35	08/27/21 16:40
92558254008	**YGWA-18I**	Water	08/27/21 09:35	08/27/21 16:40
92558254009	**YGWA-20S**	Water	08/27/21 13:10	08/27/21 16:40
92558254014	**YGWA-21I**	Water	09/01/21 14:40	09/02/21 17:02
92559527001	**YGWA-40**	Water	09/03/21 10:20	09/03/21 17:30

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92557089001	**UP-DUP-1**	EPA 6010D	KH	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089002	**GWA-2**	EPA 6010D	KH	1
		EPA 6020B	CW1	18
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089003	**YGWA-14S**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089004	**UP-DUP-2**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089005	**YGWA-1D**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089006	**YGWA-1I**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089007	**YGWA-3D**	EPA 6010D	KH	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089008	**YGWA-47**	EPA 6010D	KH	1
		EPA 6020B	CW1	13
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557089009	**YGWA-30I**	EPA 6010D	KH	1
		EPA 6020B	CW1	12

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92557720005	**YGWA-39**	EPA 6010D	DRB	4
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558251001	**YGWA-2I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558251002	**YGWA-3I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254001	**UP-FB-2**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254002	**YGWA-4I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254003	**YGWA-5I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254004	**UP-DUP-3**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254005	**YGWA-5D**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254006	**YGWA-17S**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254007	**YGWA-18S**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254008	**YGWA-18I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254009	**YGWA-20S**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92558254014	**YGWA-21I**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3
92559527001	**YGWA-40**	EPA 6010D	KH	1
		EPA 6020B	CW1	15
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		SM 2320B-2011	ECH	3
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557089001	**UP-DUP-1**					
EPA 6010D	Calcium	26.0	mg/L	1.0	08/31/21 16:52	
EPA 6020B	Barium	0.033	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Cobalt	0.065	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Copper	0.00087J	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Lithium	0.0027J	mg/L	0.030	08/31/21 16:38	
EPA 6020B	Nickel	0.013	mg/L	0.0050	08/31/21 16:38	
EPA 6020B	Zinc	0.012	mg/L	0.010	08/31/21 16:38	
SM 2540C-2011	Total Dissolved Solids	245	mg/L	10.0	08/27/21 14:06	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	08/31/21 01:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.079J	mg/L	0.10	08/31/21 01:54	
EPA 300.0 Rev 2.1 1993	Sulfate	120	mg/L	3.0	08/31/21 15:04	
92557089002	**GWA-2**					
	Performed by	CUSTOMER			08/23/21 17:45	
	pH	5.86	Std. Units		08/23/21 17:45	
EPA 6010D	Calcium	26.5	mg/L	1.0	08/31/21 16:56	
EPA 6020B	Barium	0.036	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Cobalt	0.074	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Copper	0.0012J	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Lithium	0.0028J	mg/L	0.030	08/31/21 16:44	
EPA 6020B	Nickel	0.014	mg/L	0.0050	08/31/21 16:44	
EPA 6020B	Zinc	0.014	mg/L	0.010	08/31/21 16:44	
SM 2540C-2011	Total Dissolved Solids	254	mg/L	10.0	08/27/21 14:06	
EPA 300.0 Rev 2.1 1993	Chloride	5.2	mg/L	1.0	08/31/21 02:08	
EPA 300.0 Rev 2.1 1993	Fluoride	0.060J	mg/L	0.10	08/31/21 02:08	
EPA 300.0 Rev 2.1 1993	Sulfate	121	mg/L	3.0	08/31/21 15:19	
92557089003	**YGWA-14S**					
	Performed by	CUSTOMER			08/23/21 17:45	
	pH	7.32	Std. Units		08/23/21 17:45	
EPA 6010D	Calcium	1.2	mg/L	1.0	08/31/21 17:01	
EPA 6020B	Barium	0.0077	mg/L	0.0050	08/31/21 16:49	
EPA 6020B	Beryllium	0.00022J	mg/L	0.00050	08/31/21 16:49	
EPA 6020B	Boron	0.018J	mg/L	0.040	08/31/21 16:49	
SM 2540C-2011	Total Dissolved Solids	54.0	mg/L	10.0	08/26/21 19:23	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	08/31/21 02:24	
EPA 300.0 Rev 2.1 1993	Sulfate	6.7	mg/L	1.0	08/31/21 02:24	
92557089004	**UP-DUP-2**					
EPA 6010D	Calcium	1.3	mg/L	1.0	08/31/21 17:06	
EPA 6020B	Barium	0.0080	mg/L	0.0050	08/31/21 16:55	
EPA 6020B	Beryllium	0.00020J	mg/L	0.00050	08/31/21 16:55	
EPA 6020B	Boron	0.017J	mg/L	0.040	08/31/21 16:55	
SM 2540C-2011	Total Dissolved Solids	55.0	mg/L	10.0	08/26/21 19:23	
EPA 300.0 Rev 2.1 1993	Chloride	5.0	mg/L	1.0	08/31/21 02:39	
EPA 300.0 Rev 2.1 1993	Sulfate	6.7	mg/L	1.0	08/31/21 02:39	

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SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557089005	**YGWA-1D**					
	Performed by	CUSTOMER			08/23/21 17:46	
	pH	6.32	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	14.2	mg/L	1.0	08/31/21 17:11	
EPA 6020B	Barium	0.0065	mg/L	0.0050	08/31/21 17:01	
EPA 6020B	Cobalt	0.00055J	mg/L	0.0050	08/31/21 17:01	
EPA 6020B	Lithium	0.013J	mg/L	0.030	08/31/21 17:01	
EPA 6020B	Molybdenum	0.0083J	mg/L	0.010	08/31/21 17:01	
SM 2540C-2011	Total Dissolved Solids	105	mg/L	10.0	08/26/21 19:23	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/31/21 03:24	
EPA 300.0 Rev 2.1 1993	Fluoride	0.074J	mg/L	0.10	08/31/21 03:24	
EPA 300.0 Rev 2.1 1993	Sulfate	8.9	mg/L	1.0	08/31/21 03:24	
92557089006	**YGWA-1I**					
	Performed by	CUSTOMER			08/23/21 17:46	
	pH	6.38	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	2.0	mg/L	1.0	08/31/21 17:16	
EPA 6020B	Barium	0.0079	mg/L	0.0050	08/31/21 17:07	
EPA 6020B	Cobalt	0.0017J	mg/L	0.0050	08/31/21 17:07	
EPA 6020B	Lithium	0.0023J	mg/L	0.030	08/31/21 17:07	
EPA 6020B	Molybdenum	0.0050J	mg/L	0.010	08/31/21 17:07	
SM 2540C-2011	Total Dissolved Solids	44.0	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	1.3	mg/L	1.0	08/31/21 03:39	
EPA 300.0 Rev 2.1 1993	Sulfate	4.9	mg/L	1.0	08/31/21 03:39	
92557089007	**YGWA-3D**					
	Performed by	CUSTOMER			08/23/21 17:46	
	pH	5.34	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	28.1	mg/L	1.0	08/31/21 17:20	
EPA 6020B	Barium	0.0052	mg/L	0.0050	08/31/21 17:38	
EPA 6020B	Lithium	0.023J	mg/L	0.030	08/31/21 17:38	
EPA 6020B	Molybdenum	0.013	mg/L	0.010	08/31/21 17:38	
SM 2540C-2011	Total Dissolved Solids	144	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	08/31/21 03:54	
EPA 300.0 Rev 2.1 1993	Fluoride	0.47	mg/L	0.10	08/31/21 03:54	
EPA 300.0 Rev 2.1 1993	Sulfate	7.5	mg/L	1.0	08/31/21 03:54	
92557089008	**YGWA-47**					
	Performed by	CUSTOMER			08/23/21 17:46	
	pH	5.50	Std. Units		08/23/21 17:46	
EPA 6010D	Calcium	9.6	mg/L	1.0	08/31/21 18:00	
EPA 6020B	Barium	0.029	mg/L	0.0050	08/31/21 17:44	
EPA 6020B	Boron	0.011J	mg/L	0.040	08/31/21 17:44	
EPA 6020B	Cobalt	0.00099J	mg/L	0.0050	08/31/21 17:44	
EPA 6020B	Lithium	0.0038J	mg/L	0.030	08/31/21 17:44	
SM 2540C-2011	Total Dissolved Solids	134	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	3.5	mg/L	1.0	08/31/21 04:39	

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SUMMARY OF DETECTION

Project: YATES UPGRADIENT
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Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557089008	**YGWA-47**					
EPA 300.0 Rev 2.1 1993	Sulfate	52.6	mg/L	1.0	08/31/21 04:39	
92557089009	**YGWA-30I**					
	Performed by	CUSTOMER			09/07/21 08:26	
	Collected Time	5.43			09/07/21 08:26	
EPA 6010D	Calcium	1.2	mg/L	1.0	08/31/21 18:05	
EPA 6020B	Barium	0.0071	mg/L	0.0050	08/31/21 17:50	
EPA 6020B	Cobalt	0.0052	mg/L	0.0050	08/31/21 17:50	
EPA 6020B	Lithium	0.0012J	mg/L	0.030	08/31/21 17:50	
SM 2540C-2011	Total Dissolved Solids	50.0	mg/L	10.0	08/26/21 19:24	
EPA 300.0 Rev 2.1 1993	Chloride	1.6	mg/L	1.0	08/31/21 04:54	
EPA 300.0 Rev 2.1 1993	Sulfate	1.0	mg/L	1.0	08/31/21 04:54	
92557720005	**YGWA-39**					
	Performed by	CUSTOMER			08/30/21 09:54	
	pH	6.91	Std. Units		08/30/21 09:54	
EPA 6010D	Potassium	6.6	mg/L	0.20	09/09/21 15:23	
EPA 6010D	Sodium	29.6	mg/L	1.0	09/09/21 15:23	
EPA 6010D	Calcium	14.1	mg/L	1.0	09/09/21 15:23	
EPA 6010D	Magnesium	19.1	mg/L	0.050	09/09/21 15:23	
EPA 6020B	Barium	0.038	mg/L	0.0050	09/09/21 19:44	
EPA 6020B	Boron	0.095	mg/L	0.040	09/09/21 19:44	
EPA 6020B	Cadmium	0.00049J	mg/L	0.00050	09/09/21 19:44	
EPA 6020B	Cobalt	0.0011J	mg/L	0.0050	09/09/21 19:44	
EPA 6020B	Lithium	0.0082J	mg/L	0.030	09/09/21 19:44	
EPA 6020B	Molybdenum	0.0027J	mg/L	0.010	09/09/21 19:44	
SM 2540C-2011	Total Dissolved Solids	249	mg/L	10.0	08/31/21 16:26	
EPA 300.0 Rev 2.1 1993	Chloride	7.2	mg/L	1.0	09/06/21 03:00	
EPA 300.0 Rev 2.1 1993	Fluoride	0.063J	mg/L	0.10	09/06/21 03:00	
EPA 300.0 Rev 2.1 1993	Sulfate	19.2	mg/L	1.0	09/06/21 03:00	
92558251001	**YGWA-2I**					
	Performed by	CUSTOMER			08/30/21 09:57	
	pH	7.14	Std. Units		08/30/21 09:57	
EPA 6010D	Calcium	22.6	mg/L	1.0	09/01/21 14:45	M1
EPA 6020B	Barium	0.0030J	mg/L	0.0050	09/09/21 19:50	
EPA 6020B	Lithium	0.0058J	mg/L	0.030	09/09/21 19:50	
EPA 6020B	Molybdenum	0.0048J	mg/L	0.010	09/09/21 19:50	
SM 2540C-2011	Total Dissolved Solids	150	mg/L	10.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	0.99J	mg/L	1.0	09/06/21 03:16	M1
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	09/06/21 03:16	M1
EPA 300.0 Rev 2.1 1993	Sulfate	16.7	mg/L	1.0	09/06/21 03:16	M1
92558251002	**YGWA-3I**					
	Performed by	CUSTOMER			08/30/21 09:57	
	pH	7.39	Std. Units		08/30/21 09:57	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558251002	**YGWA-3I**					
EPA 6010D	Calcium	24.7	mg/L	1.0	09/01/21 15:04	
EPA 6020B	Barium	0.0039J	mg/L	0.0050	09/09/21 19:55	
EPA 6020B	Lithium	0.026J	mg/L	0.030	09/09/21 19:55	
EPA 6020B	Molybdenum	0.0099J	mg/L	0.010	09/09/21 19:55	
SM 2540C-2011	Total Dissolved Solids	155	mg/L	10.0	08/31/21 16:51	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	09/06/21 04:03	
EPA 300.0 Rev 2.1 1993	Fluoride	0.12	mg/L	0.10	09/06/21 04:03	
EPA 300.0 Rev 2.1 1993	Sulfate	18.2	mg/L	1.0	09/06/21 04:03	
92558254002	**YGWA-4I**					
	Performed by	CUSTOMER			08/30/21 10:06	
	pH	5.82	Std. Units		08/30/21 10:06	
EPA 6010D	Calcium	7.6	mg/L	1.0	09/15/21 17:43	
EPA 6020B	Barium	0.012	mg/L	0.0050	09/16/21 09:38	
EPA 6020B	Cobalt	0.00042J	mg/L	0.0050	09/16/21 09:38	
EPA 6020B	Lithium	0.0094J	mg/L	0.030	09/16/21 09:38	
SM 2540C-2011	Total Dissolved Solids	93.0	mg/L	10.0	08/31/21 16:26	
EPA 300.0 Rev 2.1 1993	Chloride	4.4	mg/L	1.0	09/06/21 04:35	
EPA 300.0 Rev 2.1 1993	Sulfate	8.5	mg/L	1.0	09/06/21 04:35	
92558254003	**YGWA-5I**					
	Performed by	CUSTOMER			08/30/21 10:06	
	pH	5.51	Std. Units		08/30/21 10:06	
EPA 6010D	Calcium	2.5	mg/L	1.0	09/15/21 18:13	
EPA 6020B	Barium	0.019	mg/L	0.0050	09/16/21 09:44	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	09/16/21 09:44	
SM 2540C-2011	Total Dissolved Solids	86.0	mg/L	10.0	08/31/21 16:27	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	09/06/21 05:23	
EPA 300.0 Rev 2.1 1993	Sulfate	2.4	mg/L	1.0	09/06/21 05:23	
92558254004	**UP-DUP-3**					
EPA 6010D	Calcium	2.5	mg/L	1.0	09/15/21 18:17	
EPA 6020B	Barium	0.018	mg/L	0.0050	09/16/21 09:50	
EPA 6020B	Lithium	0.0031J	mg/L	0.030	09/16/21 09:50	
SM 2540C-2011	Total Dissolved Solids	80.0	mg/L	10.0	08/31/21 16:27	
EPA 300.0 Rev 2.1 1993	Chloride	4.3	mg/L	1.0	09/06/21 05:39	
EPA 300.0 Rev 2.1 1993	Sulfate	2.5	mg/L	1.0	09/06/21 05:39	
92558254005	**YGWA-5D**					
	Performed by	CUSTOMER			08/30/21 10:06	
	pH	7.16	Std. Units		08/30/21 10:06	
EPA 6010D	Calcium	25.2	mg/L	1.0	09/15/21 18:22	
EPA 6020B	Arsenic	0.0016J	mg/L	0.0050	09/16/21 09:55	
EPA 6020B	Barium	0.0092	mg/L	0.0050	09/16/21 09:55	
EPA 6020B	Boron	0.0090J	mg/L	0.040	09/16/21 09:55	
EPA 6020B	Lithium	0.0075J	mg/L	0.030	09/16/21 09:55	
EPA 6020B	Molybdenum	0.0010J	mg/L	0.010	09/16/21 09:55	

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SUMMARY OF DETECTION

Project: YATES UPGRADIENT
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Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558254005	**YGWA-5D**					
SM 2540C-2011	Total Dissolved Solids	123	mg/L	10.0	08/31/21 16:50	
EPA 300.0 Rev 2.1 1993	Chloride	3.4	mg/L	1.0	09/06/21 05:55	
EPA 300.0 Rev 2.1 1993	Fluoride	0.061J	mg/L	0.10	09/06/21 05:55	
EPA 300.0 Rev 2.1 1993	Sulfate	6.0	mg/L	1.0	09/06/21 05:55	
92558254006	**YGWA-17S**					
	Performed by	CUSTOMER			08/30/21 10:07	
	pH	5.27	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	2.7	mg/L	1.0	09/15/21 18:27	
EPA 6020B	Barium	0.016	mg/L	0.0050	09/16/21 10:36	
EPA 6020B	Beryllium	0.00010J	mg/L	0.00050	09/16/21 10:36	
EPA 6020B	Boron	0.011J	mg/L	0.040	09/16/21 10:36	
SM 2540C-2011	Total Dissolved Solids	93.0	mg/L	10.0	08/31/21 16:52	
EPA 300.0 Rev 2.1 1993	Chloride	8.5	mg/L	1.0	09/06/21 06:11	
EPA 300.0 Rev 2.1 1993	Sulfate	5.3	mg/L	1.0	09/06/21 06:11	
92558254007	**YGWA-18S**					
	Performed by	CUSTOMER			08/30/21 10:07	
	pH	4.40	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	0.98J	mg/L	1.0	09/15/21 18:32	
EPA 6020B	Barium	0.015	mg/L	0.0050	09/16/21 10:41	
EPA 6020B	Beryllium	0.000093J	mg/L	0.00050	09/16/21 10:41	
EPA 6020B	Lithium	0.0019J	mg/L	0.030	09/16/21 10:41	
SM 2540C-2011	Total Dissolved Solids	31.0	mg/L	10.0	08/31/21 16:50	
EPA 300.0 Rev 2.1 1993	Chloride	7.3	mg/L	1.0	09/06/21 06:27	
EPA 300.0 Rev 2.1 1993	Sulfate	1.2	mg/L	1.0	09/06/21 06:27	
92558254008	**YGWA-18I**					
	Performed by	CUSTOMER			08/30/21 10:07	
	pH	5.40	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	5.1	mg/L	1.0	09/15/21 18:36	
EPA 6020B	Barium	0.020	mg/L	0.0050	09/16/21 10:47	
EPA 6020B	Lithium	0.0032J	mg/L	0.030	09/16/21 10:47	
SM 2540C-2011	Total Dissolved Solids	112	mg/L	10.0	08/31/21 16:52	
EPA 300.0 Rev 2.1 1993	Chloride	7.4	mg/L	1.0	09/06/21 06:43	
EPA 300.0 Rev 2.1 1993	Sulfate	0.59J	mg/L	1.0	09/06/21 06:43	
92558254009	**YGWA-20S**					
	Performed by	CUSTOMER			08/30/21 10:07	
	pH	5.57	Std. Units		08/30/21 10:07	
EPA 6010D	Calcium	2.4	mg/L	1.0	09/15/21 18:41	
EPA 6020B	Barium	0.013	mg/L	0.0050	09/16/21 10:53	
EPA 6020B	Beryllium	0.000059J	mg/L	0.00050	09/16/21 10:53	
SM 2540C-2011	Total Dissolved Solids	67.0	mg/L	10.0	08/31/21 16:52	
EPA 300.0 Rev 2.1 1993	Chloride	2.8	mg/L	1.0	09/06/21 07:31	M1

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SUMMARY OF DETECTION

Project: YATES UPGRADIENT
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Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558254014	**YGWA-21I**					
	Performed by	CUSTOMER			09/03/21 11:11	
	pH	6.65	Std. Units		09/03/21 11:11	
EPA 6010D	Calcium	9.5	mg/L	1.0	09/15/21 19:15	
EPA 6020B	Barium	0.0099	mg/L	0.0050	09/16/21 11:21	
EPA 6020B	Cobalt	0.0068	mg/L	0.0050	09/16/21 11:21	
EPA 6020B	Lithium	0.0057J	mg/L	0.030	09/16/21 11:21	
SM 2540C-2011	Total Dissolved Solids	137	mg/L	10.0	09/07/21 13:47	
EPA 300.0 Rev 2.1 1993	Chloride	1.8	mg/L	1.0	09/08/21 07:26	
EPA 300.0 Rev 2.1 1993	Fluoride	0.11	mg/L	0.10	09/08/21 07:26	
EPA 300.0 Rev 2.1 1993	Sulfate	5.0	mg/L	1.0	09/08/21 07:26	
92559527001	**YGWA-40**					
	Performed by	CUSTOMER			09/03/21 17:47	
	pH	4.75	Std. Units		09/03/21 17:47	
EPA 6010D	Calcium	5.6	mg/L	1.0	09/13/21 16:20	
EPA 6020B	Barium	0.035	mg/L	0.0050	09/14/21 19:02	
EPA 6020B	Beryllium	0.00024J	mg/L	0.00050	09/14/21 19:02	
EPA 6020B	Boron	0.077	mg/L	0.040	09/14/21 19:02	
EPA 6020B	Magnesium	3.1	mg/L	0.050	09/14/21 19:02	
EPA 6020B	Potassium	2.0	mg/L	0.10	09/14/21 19:02	
EPA 6020B	Sodium	9.1	mg/L	0.10	09/14/21 19:02	
EPA 7470A	Mercury	0.00012J	mg/L	0.00020	09/21/21 10:46	
SM 2540C-2011	Total Dissolved Solids	88.0	mg/L	10.0	09/08/21 14:23	
SM 2320B-2011	Alkalinity,Bicarbonate (CaCO3)	13.8	mg/L	5.0	09/13/21 17:45	
SM 2320B-2011	Alkalinity, Total as CaCO3	13.8	mg/L	5.0	09/13/21 17:45	
EPA 300.0 Rev 2.1 1993	Chloride	5.5	mg/L	1.0	09/10/21 09:18	
EPA 300.0 Rev 2.1 1993	Sulfate	21.3	mg/L	1.0	09/10/21 09:18	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: UP-DUP-1 **Lab ID: 92557089001** Collected: 08/20/21 00:00 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**26.0**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 16:52	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:38	7440-38-2	
Barium	**0.033**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:38	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:38	7440-47-3	
Cobalt	**0.065**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:38	7440-48-4	
Copper	**0.00087J**	mg/L	0.0050	0.00050	1	08/31/21 09:25	08/31/21 16:38	7440-50-8	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:38	7439-92-1	
Lithium	**0.0027J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:38	7439-98-7	
Nickel	**0.013**	mg/L	0.0050	0.00071	1	08/31/21 09:25	08/31/21 16:38	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:38	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/31/21 09:25	08/31/21 16:38	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/31/21 09:25	08/31/21 16:38	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	08/31/21 09:25	08/31/21 16:38	7440-62-2	
Zinc	**0.012**	mg/L	0.010	0.0070	1	08/31/21 09:25	08/31/21 16:38	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	08/30/21 12:30	08/31/21 11:40	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**245**	mg/L	10.0	10.0	1		08/27/21 14:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.2**	mg/L	1.0	0.60	1		08/31/21 01:54	16887-00-6	
Fluoride	**0.079J**	mg/L	0.10	0.050	1		08/31/21 01:54	16984-48-8	
Sulfate	**120**	mg/L	3.0	1.5	3		08/31/21 15:04	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: GWA-2 **Lab ID: 92557089002** Collected: 08/20/21 12:00 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:45		
pH	**5.86**	Std. Units			1		08/23/21 17:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**26.5**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 16:56	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:44	7440-38-2	
Barium	**0.036**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:44	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:44	7440-47-3	
Cobalt	**0.074**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:44	7440-48-4	
Copper	**0.0012J**	mg/L	0.0050	0.00050	1	08/31/21 09:25	08/31/21 16:44	7440-50-8	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:44	7439-92-1	
Lithium	**0.0028J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:44	7439-98-7	
Nickel	**0.014**	mg/L	0.0050	0.00071	1	08/31/21 09:25	08/31/21 16:44	7440-02-0	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:44	7782-49-2	
Silver	ND	mg/L	0.0050	0.00044	1	08/31/21 09:25	08/31/21 16:44	7440-22-4	
Thallium	ND	mg/L	0.0010	0.00018	1	08/31/21 09:25	08/31/21 16:44	7440-28-0	
Vanadium	ND	mg/L	0.010	0.0019	1	08/31/21 09:25	08/31/21 16:44	7440-62-2	
Zinc	**0.014**	mg/L	0.010	0.0070	1	08/31/21 09:25	08/31/21 16:44	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	08/30/21 12:30	08/31/21 11:43	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**254**	mg/L	10.0	10.0	1		08/27/21 14:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.2**	mg/L	1.0	0.60	1		08/31/21 02:08	16887-00-6	
Fluoride	**0.060J**	mg/L	0.10	0.050	1		08/31/21 02:08	16984-48-8	
Sulfate	**121**	mg/L	3.0	1.5	3		08/31/21 15:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-14S **Lab ID: 92557089003** Collected: 08/19/21 11:00 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:45		
pH	**7.32**	Std. Units			1		08/23/21 17:45		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.2**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:01	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:49	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:49	7440-38-2	
Barium	**0.0077**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:49	7440-39-3	
Beryllium	**0.00022J**	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:49	7440-41-7	
Boron	**0.018J**	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:49	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:49	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:49	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:49	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:49	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:49	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:49	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:49	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**54.0**	mg/L	10.0	10.0	1		08/26/21 19:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.0**	mg/L	1.0	0.60	1		08/31/21 02:24	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 02:24	16984-48-8	
Sulfate	**6.7**	mg/L	1.0	0.50	1		08/31/21 02:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: UP-DUP-2 **Lab ID: 92557089004** Collected: 08/19/21 00:00 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.3**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:06	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 16:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:55	7440-38-2	
Barium	**0.0080**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 16:55	7440-39-3	
Beryllium	**0.00020J**	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 16:55	7440-41-7	
Boron	**0.017J**	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 16:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 16:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 16:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 16:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 16:55	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 16:55	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 16:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 16:55	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**55.0**	mg/L	10.0	10.0	1		08/26/21 19:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.0**	mg/L	1.0	0.60	1		08/31/21 02:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 02:39	16984-48-8	
Sulfate	**6.7**	mg/L	1.0	0.50	1		08/31/21 02:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-1D **Lab ID: 92557089005** Collected: 08/19/21 11:10 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**6.32**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**14.2**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:11	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:01	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:01	7440-38-2	
Barium	**0.0065**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:01	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:01	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:01	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:01	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:01	7440-47-3	
Cobalt	**0.00055J**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:01	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:01	7439-92-1	
Lithium	**0.013J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:01	7439-93-2	
Molybdenum	**0.0083J**	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:01	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:01	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**105**	mg/L	10.0	10.0	1		08/26/21 19:23		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		08/31/21 03:24	16887-00-6	
Fluoride	**0.074J**	mg/L	0.10	0.050	1		08/31/21 03:24	16984-48-8	
Sulfate	**8.9**	mg/L	1.0	0.50	1		08/31/21 03:24	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-1I **Lab ID: 92557089006** Collected: 08/19/21 12:49 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**6.38**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.0**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:16	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:07	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:07	7440-38-2	
Barium	**0.0079**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:07	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:07	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:07	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:07	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:07	7440-47-3	
Cobalt	**0.0017J**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:07	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:07	7439-92-1	
Lithium	**0.0023J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:07	7439-93-2	
Molybdenum	**0.0050J**	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:07	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:07	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**44.0**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.3**	mg/L	1.0	0.60	1		08/31/21 03:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 03:39	16984-48-8	
Sulfate	**4.9**	mg/L	1.0	0.50	1		08/31/21 03:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-3D **Lab ID: 92557089007** Collected: 08/19/21 14:45 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**5.34**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**28.1**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 17:20	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:38	7440-38-2	
Barium	**0.0052**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:38	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:38	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:38	7439-92-1	
Lithium	**0.023J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:38	7439-93-2	
Molybdenum	**0.013**	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:38	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**144**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		08/31/21 03:54	16887-00-6	
Fluoride	**0.47**	mg/L	0.10	0.050	1		08/31/21 03:54	16984-48-8	
Sulfate	**7.5**	mg/L	1.0	0.50	1		08/31/21 03:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-47 **Lab ID: 92557089008** Collected: 08/19/21 10:26 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/23/21 17:46		
pH	**5.50**	Std. Units			1		08/23/21 17:46		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**9.6**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 18:00	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:44	7440-38-2	
Barium	**0.029**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:44	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:44	7440-47-3	
Cobalt	**0.00099J**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:44	7439-92-1	
Lithium	**0.0038J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:44	7782-49-2	
Thallium	ND	mg/L	0.0010	0.00018	1	08/31/21 09:25	08/31/21 17:44	7440-28-0	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	08/30/21 12:30	08/31/21 12:05	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**134**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.5**	mg/L	1.0	0.60	1		08/31/21 04:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 04:39	16984-48-8	
Sulfate	**52.6**	mg/L	1.0	0.50	1		08/31/21 04:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-30I **Lab ID: 92557089009** Collected: 08/19/21 12:20 Received: 08/20/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/07/21 08:26		
Collected Time	**5.43**				1		09/07/21 08:26		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**1.2**	mg/L	1.0	0.12	1	08/31/21 09:25	08/31/21 18:05	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	08/31/21 09:25	08/31/21 17:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:50	7440-38-2	
Barium	**0.0071**	mg/L	0.0050	0.00067	1	08/31/21 09:25	08/31/21 17:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	08/31/21 09:25	08/31/21 17:50	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	08/31/21 09:25	08/31/21 17:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	08/31/21 09:25	08/31/21 17:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	08/31/21 09:25	08/31/21 17:50	7440-47-3	
Cobalt	**0.0052**	mg/L	0.0050	0.00039	1	08/31/21 09:25	08/31/21 17:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	08/31/21 09:25	08/31/21 17:50	7439-92-1	
Lithium	**0.0012J**	mg/L	0.030	0.00073	1	08/31/21 09:25	08/31/21 17:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	08/31/21 09:25	08/31/21 17:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	08/31/21 09:25	08/31/21 17:50	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**50.0**	mg/L	10.0	10.0	1		08/26/21 19:24		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.6**	mg/L	1.0	0.60	1		08/31/21 04:54	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/31/21 04:54	16984-48-8	
Sulfate	**1.0**	mg/L	1.0	0.50	1		08/31/21 04:54	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-39 **Lab ID: 92557720005** Collected: 08/26/21 12:30 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 09:54		
pH	**6.91**	Std. Units			1		08/30/21 09:54		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Potassium	**6.6**	mg/L	0.20	0.15	1	09/09/21 11:30	09/09/21 15:23	7440-09-7	
Sodium	**29.6**	mg/L	1.0	0.58	1	09/09/21 11:30	09/09/21 15:23	7440-23-5	
Calcium	**14.1**	mg/L	1.0	0.12	1	09/09/21 11:30	09/09/21 15:23	7440-70-2	
Magnesium	**19.1**	mg/L	0.050	0.012	1	09/09/21 11:30	09/09/21 15:23	7439-95-4	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:44	7440-38-2	
Barium	**0.038**	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:44	7440-41-7	
Boron	**0.095**	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:44	7440-42-8	
Cadmium	**0.00049J**	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:44	7440-47-3	
Cobalt	**0.0011J**	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:44	7439-92-1	
Lithium	**0.0082J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:44	7439-93-2	
Molybdenum	**0.0027J**	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:44	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/09/21 10:30	09/09/21 16:59	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**249**	mg/L	10.0	10.0	1		08/31/21 16:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.2**	mg/L	1.0	0.60	1		09/06/21 03:00	16887-00-6	
Fluoride	**0.063J**	mg/L	0.10	0.050	1		09/06/21 03:00	16984-48-8	
Sulfate	**19.2**	mg/L	1.0	0.50	1		09/06/21 03:00	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-2I **Lab ID: 92558251001** Collected: 08/27/21 11:33 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 09:57		
pH	**7.14**	Std. Units			1		08/30/21 09:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**22.6**	mg/L	1.0	0.12	1	09/01/21 10:48	09/01/21 14:45	7440-70-2	M1
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:50	7440-38-2	
Barium	**0.0030J**	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:50	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:50	7439-92-1	
Lithium	**0.0058J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:50	7439-93-2	
Molybdenum	**0.0048J**	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:50	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**150**	mg/L	10.0	10.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**0.99J**	mg/L	1.0	0.60	1		09/06/21 03:16	16887-00-6	M1
Fluoride	**0.12**	mg/L	0.10	0.050	1		09/06/21 03:16	16984-48-8	M1
Sulfate	**16.7**	mg/L	1.0	0.50	1		09/06/21 03:16	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-3I **Lab ID: 92558251002** Collected: 08/27/21 09:55 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 09:57		
pH	**7.39**	Std. Units			1		08/30/21 09:57		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**24.7**	mg/L	1.0	0.12	1	09/01/21 10:48	09/01/21 15:04	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/09/21 11:00	09/09/21 19:55	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:55	7440-38-2	
Barium	**0.0039J**	mg/L	0.0050	0.00067	1	09/09/21 11:00	09/09/21 19:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/09/21 11:00	09/09/21 19:55	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/09/21 11:00	09/09/21 19:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/09/21 11:00	09/09/21 19:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/09/21 11:00	09/09/21 19:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/09/21 11:00	09/09/21 19:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/09/21 11:00	09/09/21 19:55	7439-92-1	
Lithium	**0.026J**	mg/L	0.030	0.00073	1	09/09/21 11:00	09/09/21 19:55	7439-93-2	
Molybdenum	**0.0099J**	mg/L	0.010	0.00074	1	09/09/21 11:00	09/09/21 19:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/09/21 11:00	09/09/21 19:55	7782-49-2	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**155**	mg/L	10.0	10.0	1		08/31/21 16:51		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		09/06/21 04:03	16887-00-6	
Fluoride	**0.12**	mg/L	0.10	0.050	1		09/06/21 04:03	16984-48-8	
Sulfate	**18.2**	mg/L	1.0	0.50	1		09/06/21 04:03	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: UP-FB-2 **Lab ID: 92558254001** Collected: 08/26/21 17:10 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	ND	mg/L	1.0	0.12	1	09/14/21 11:36	09/14/21 16:39	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:32	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:32	7440-38-2	
Barium	ND	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:32	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:32	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:32	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:32	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:32	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:32	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:32	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:32	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:32	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:32	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:13	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	ND	mg/L	10.0	10.0	1		08/31/21 16:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	ND	mg/L	1.0	0.60	1		09/06/21 04:19	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 04:19	16984-48-8	
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 04:19	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-4I **Lab ID: 92558254002** Collected: 08/26/21 11:29 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:06		
pH	**5.82**	Std. Units			1		08/30/21 10:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**7.6**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 17:43	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:38	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:38	7440-38-2	
Barium	**0.012**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:38	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:38	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:38	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:38	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:38	7440-47-3	
Cobalt	**0.00042J**	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:38	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:38	7439-92-1	
Lithium	**0.0094J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:38	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:38	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:38	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**93.0**	mg/L	10.0	10.0	1		08/31/21 16:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.4**	mg/L	1.0	0.60	1		09/06/21 04:35	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 04:35	16984-48-8	
Sulfate	**8.5**	mg/L	1.0	0.50	1		09/06/21 04:35	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-5I **Lab ID: 92558254003** Collected: 08/26/21 16:28 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:06		
pH	**5.51**	Std. Units			1		08/30/21 10:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.5**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:13	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:44	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:44	7440-38-2	
Barium	**0.019**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:44	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:44	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:44	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:44	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:44	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:44	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:44	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:44	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:44	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:44	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:26	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**86.0**	mg/L	10.0	10.0	1		08/31/21 16:27		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.3**	mg/L	1.0	0.60	1		09/06/21 05:23	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 05:23	16984-48-8	
Sulfate	**2.4**	mg/L	1.0	0.50	1		09/06/21 05:23	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: UP-DUP-3 **Lab ID: 92558254004** Collected: 08/26/21 00:00 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.5**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:17	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:50	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:50	7440-38-2	
Barium	**0.018**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:50	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:50	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:50	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:50	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:50	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:50	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:50	7439-92-1	
Lithium	**0.0031J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:50	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:50	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:50	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:29	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**80.0**	mg/L	10.0	10.0	1		08/31/21 16:27		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**4.3**	mg/L	1.0	0.60	1		09/06/21 05:39	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 05:39	16984-48-8	
Sulfate	**2.5**	mg/L	1.0	0.50	1		09/06/21 05:39	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-5D **Lab ID: 92558254005** Collected: 08/26/21 13:35 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:06		
pH	**7.16**	Std. Units			1		08/30/21 10:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**25.2**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:22	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 09:55	7440-36-0	
Arsenic	**0.0016J**	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:55	7440-38-2	
Barium	**0.0092**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 09:55	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 09:55	7440-41-7	
Boron	**0.0090J**	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 09:55	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 09:55	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 09:55	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 09:55	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 09:55	7439-92-1	
Lithium	**0.0075J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 09:55	7439-93-2	
Molybdenum	**0.0010J**	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 09:55	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 09:55	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:37	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**123**	mg/L	10.0	10.0	1		08/31/21 16:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**3.4**	mg/L	1.0	0.60	1		09/06/21 05:55	16887-00-6	
Fluoride	**0.061J**	mg/L	0.10	0.050	1		09/06/21 05:55	16984-48-8	
Sulfate	**6.0**	mg/L	1.0	0.50	1		09/06/21 05:55	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-17S **Lab ID: 92558254006** Collected: 08/27/21 10:45 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**5.27**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.7**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:27	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:36	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:36	7440-38-2	
Barium	**0.016**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:36	7440-39-3	
Beryllium	**0.00010J**	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:36	7440-41-7	
Boron	**0.011J**	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:36	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:36	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:36	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:36	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:36	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:36	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:39	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**93.0**	mg/L	10.0	10.0	1		08/31/21 16:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**8.5**	mg/L	1.0	0.60	1		09/06/21 06:11	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 06:11	16984-48-8	
Sulfate	**5.3**	mg/L	1.0	0.50	1		09/06/21 06:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-18S **Lab ID: 92558254007** Collected: 08/26/21 15:35 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**4.40**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**0.98J**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:32	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:41	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:41	7440-38-2	
Barium	**0.015**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:41	7440-39-3	
Beryllium	**0.000093J**	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:41	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:41	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:41	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:41	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:41	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:41	7439-92-1	
Lithium	**0.0019J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:41	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:41	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:41	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:42	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**31.0**	mg/L	10.0	10.0	1		08/31/21 16:50		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.3**	mg/L	1.0	0.60	1		09/06/21 06:27	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 06:27	16984-48-8	
Sulfate	**1.2**	mg/L	1.0	0.50	1		09/06/21 06:27	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-18I **Lab ID: 92558254008** Collected: 08/27/21 09:35 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**5.40**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.1**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:36	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:47	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:47	7440-38-2	
Barium	**0.020**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:47	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:47	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:47	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:47	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:47	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:47	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:47	7439-92-1	
Lithium	**0.0032J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:47	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:47	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:47	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:45	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**112**	mg/L	10.0	10.0	1		08/31/21 16:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**7.4**	mg/L	1.0	0.60	1		09/06/21 06:43	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 06:43	16984-48-8	
Sulfate	**0.59J**	mg/L	1.0	0.50	1		09/06/21 06:43	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-20S **Lab ID: 92558254009** Collected: 08/27/21 13:10 Received: 08/27/21 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		08/30/21 10:07		
pH	**5.57**	Std. Units			1		08/30/21 10:07		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**2.4**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 18:41	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 10:53	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:53	7440-38-2	
Barium	**0.013**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 10:53	7440-39-3	
Beryllium	**0.000059J**	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 10:53	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 10:53	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 10:53	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 10:53	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 10:53	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 10:53	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 10:53	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 10:53	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 10:53	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 14:47	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**67.0**	mg/L	10.0	10.0	1		08/31/21 16:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**2.8**	mg/L	1.0	0.60	1		09/06/21 07:31	16887-00-6	M1
Fluoride	ND	mg/L	0.10	0.050	1		09/06/21 07:31	16984-48-8	M1
Sulfate	ND	mg/L	1.0	0.50	1		09/06/21 07:31	14808-79-8	M1

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-21I **Lab ID: 92558254014** Collected: 09/01/21 14:40 Received: 09/02/21 17:02 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 11:11		
pH	**6.65**	Std. Units			1		09/03/21 11:11		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**9.5**	mg/L	1.0	0.12	1	09/15/21 11:37	09/15/21 19:15	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/15/21 13:00	09/16/21 11:21	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:21	7440-38-2	
Barium	**0.0099**	mg/L	0.0050	0.00067	1	09/15/21 13:00	09/16/21 11:21	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	09/15/21 13:00	09/16/21 11:21	7440-41-7	
Boron	ND	mg/L	0.040	0.0086	1	09/15/21 13:00	09/16/21 11:21	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/15/21 13:00	09/16/21 11:21	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/15/21 13:00	09/16/21 11:21	7440-47-3	
Cobalt	**0.0068**	mg/L	0.0050	0.00039	1	09/15/21 13:00	09/16/21 11:21	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/15/21 13:00	09/16/21 11:21	7439-92-1	
Lithium	**0.0057J**	mg/L	0.030	0.00073	1	09/15/21 13:00	09/16/21 11:21	7439-93-2	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/15/21 13:00	09/16/21 11:21	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/15/21 13:00	09/16/21 11:21	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	09/15/21 10:30	09/15/21 15:06	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**137**	mg/L	10.0	10.0	1		09/07/21 13:47		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.8**	mg/L	1.0	0.60	1		09/08/21 07:26	16887-00-6	
Fluoride	**0.11**	mg/L	0.10	0.050	1		09/08/21 07:26	16984-48-8	
Sulfate	**5.0**	mg/L	1.0	0.50	1		09/08/21 07:26	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-40 **Lab ID: 92559527001** Collected: 09/03/21 10:20 Received: 09/03/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/03/21 17:47		
pH	**4.75**	Std. Units			1		09/03/21 17:47		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**5.6**	mg/L	1.0	0.12	1	09/11/21 09:00	09/13/21 16:20	7440-70-2	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Antimony	ND	mg/L	0.0030	0.00078	1	09/11/21 09:00	09/14/21 19:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:02	7440-38-2	
Barium	**0.035**	mg/L	0.0050	0.00067	1	09/11/21 09:00	09/14/21 19:02	7440-39-3	
Beryllium	**0.00024J**	mg/L	0.00050	0.000054	1	09/11/21 09:00	09/14/21 19:02	7440-41-7	
Boron	**0.077**	mg/L	0.040	0.0086	1	09/11/21 09:00	09/14/21 19:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	09/11/21 09:00	09/14/21 19:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	09/11/21 09:00	09/14/21 19:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	09/11/21 09:00	09/14/21 19:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	09/11/21 09:00	09/14/21 19:02	7439-92-1	
Lithium	ND	mg/L	0.030	0.00073	1	09/11/21 09:00	09/14/21 19:02	7439-93-2	
Magnesium	**3.1**	mg/L	0.050	0.0074	1	09/11/21 09:00	09/14/21 19:02	7439-95-4	
Molybdenum	ND	mg/L	0.010	0.00074	1	09/11/21 09:00	09/14/21 19:02	7439-98-7	
Potassium	**2.0**	mg/L	0.10	0.047	1	09/11/21 09:00	09/14/21 19:02	7440-09-7	
Selenium	ND	mg/L	0.0050	0.0014	1	09/11/21 09:00	09/14/21 19:02	7782-49-2	
Sodium	**9.1**	mg/L	0.10	0.022	1	09/11/21 09:00	09/14/21 19:02	7440-23-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.00012J**	mg/L	0.00020	0.000078	1	09/21/21 07:00	09/21/21 10:46	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**88.0**	mg/L	10.0	10.0	1		09/08/21 14:23		
2320B Alkalinity	Analytical Method: SM 2320B-2011 Pace Analytical Services - Asheville								
Alkalinity,Bicarbonate (CaCO3)	**13.8**	mg/L	5.0	5.0	1		09/13/21 17:45		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	5.0	5.0	1		09/13/21 17:45		
Alkalinity, Total as CaCO3	**13.8**	mg/L	5.0	5.0	1		09/13/21 17:45		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**5.5**	mg/L	1.0	0.60	1		09/10/21 09:18	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		09/10/21 09:18	16984-48-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Sample: YGWA-40 **Lab ID: 92559527001** Collected: 09/03/21 10:20 Received: 09/03/21 17:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Sulfate	**21.3**	mg/L	1.0	0.50	1		09/10/21 09:18	14808-79-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644090
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3379384 Matrix: Water
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	08/31/21 15:03	

LABORATORY CONTROL SAMPLE: 3379385

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379386 3379387

Parameter	Units	92555948008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	141	1	1	141	141	-23	-77	75-125	0	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644451
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558251001, 92558251002

METHOD BLANK: 3381031 Matrix: Water
Associated Lab Samples: 92558251001, 92558251002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/01/21 14:13	

LABORATORY CONTROL SAMPLE: 3381032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3381033 3381034

Parameter	Units	92558251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	22.6	1	1	24.4	24.2	181	153	75-125	1	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645799
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720005

METHOD BLANK: 3387400 Matrix: Water
Associated Lab Samples: 92557720005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/09/21 14:40	
Magnesium	mg/L	ND	0.050	0.012	09/09/21 14:40	
Potassium	mg/L	ND	0.20	0.15	09/09/21 14:40	
Sodium	mg/L	ND	1.0	0.58	09/09/21 14:40	

LABORATORY CONTROL SAMPLE: 3387401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	
Magnesium	mg/L	1	1.1	108	80-120	
Potassium	mg/L	1	1.0	104	80-120	
Sodium	mg/L	1	1.1	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387402 3387403

Parameter	Units	92557720001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	79.9	1	1	78.2	78.5	-168	-139	75-125	0	20	M1
Magnesium	mg/L	80.9	1	1	79.7	80.4	-116	-50	75-125	1	20	M1
Potassium	mg/L	11.5	1	1	12.3	12.5	73	92	75-125	2	20	M1
Sodium	mg/L	36.4	1	1	36.7	37.2	28	79	75-125	1	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646610
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559527001

METHOD BLANK: 3391819 Matrix: Water
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/13/21 14:48	

LABORATORY CONTROL SAMPLE: 3391820

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391821 3391822

Parameter	Units	92558259010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	1.4	1	1	2.5	2.5	106	109	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647011
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254001

METHOD BLANK: 3393694 Matrix: Water
Associated Lab Samples: 92558254001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/14/21 16:29	

LABORATORY CONTROL SAMPLE: 3393695

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3393696 3393697

Parameter	Units	92558254001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	ND	1	1	1.1	1.0	108	103	75-125	4	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647336 — Analysis Method: EPA 6010D
QC Batch Method: EPA 3010A — Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

METHOD BLANK: 3395362 — Matrix: Water
Associated Lab Samples: 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	09/15/21 17:34	

LABORATORY CONTROL SAMPLE: 3395363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395364 3395365

Parameter	Units	92558254002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	7.6	1	1	8.6	8.8	93	118	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644091
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3379388 Matrix: Water
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	08/31/21 15:02	
Arsenic	mg/L	ND	0.0050	0.0011	08/31/21 15:02	
Barium	mg/L	ND	0.0050	0.00067	08/31/21 15:02	
Beryllium	mg/L	ND	0.00050	0.000054	08/31/21 15:02	
Boron	mg/L	ND	0.040	0.0086	08/31/21 15:02	
Cadmium	mg/L	ND	0.00050	0.00011	08/31/21 15:02	
Chromium	mg/L	ND	0.0050	0.0011	08/31/21 15:02	
Cobalt	mg/L	ND	0.0050	0.00039	08/31/21 15:02	
Copper	mg/L	ND	0.0050	0.00050	08/31/21 15:02	
Lead	mg/L	ND	0.0010	0.00089	08/31/21 15:02	
Lithium	mg/L	ND	0.030	0.00073	08/31/21 15:02	
Molybdenum	mg/L	ND	0.010	0.00074	08/31/21 15:02	
Nickel	mg/L	ND	0.0050	0.00071	08/31/21 15:02	
Selenium	mg/L	ND	0.0050	0.0014	08/31/21 15:02	
Silver	mg/L	ND	0.0050	0.00044	08/31/21 15:02	
Thallium	mg/L	ND	0.0010	0.00018	08/31/21 15:02	
Vanadium	mg/L	ND	0.010	0.0019	08/31/21 15:02	
Zinc	mg/L	ND	0.010	0.0070	08/31/21 15:02	

LABORATORY CONTROL SAMPLE: 3379389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.092	92	80-120	
Arsenic	mg/L	0.1	0.097	97	80-120	
Barium	mg/L	0.1	0.090	90	80-120	
Beryllium	mg/L	0.1	0.10	100	80-120	
Boron	mg/L	1	1.0	103	80-120	
Cadmium	mg/L	0.1	0.097	97	80-120	
Chromium	mg/L	0.1	0.10	104	80-120	
Cobalt	mg/L	0.1	0.10	103	80-120	
Copper	mg/L	0.1	0.10	101	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.092	92	80-120	
Nickel	mg/L	0.1	0.10	103	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Silver	mg/L	0.1	0.094	94	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

LABORATORY CONTROL SAMPLE: 3379389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Thallium	mg/L	0.1	0.10	102	80-120	
Vanadium	mg/L	0.1	0.10	104	80-120	
Zinc	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379390 3379391

Parameter	Units	92555948009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.091	0.089	91	89	75-125	2	20	
Arsenic	mg/L	0.0014J	0.1	0.1	0.10	0.096	100	95	75-125	5	20	
Barium	mg/L	0.029	0.1	0.1	0.13	0.13	104	101	75-125	3	20	
Beryllium	mg/L	ND	0.1	0.1	0.098	0.094	97	94	75-125	3	20	
Boron	mg/L	0.093	1	1	1.1	1.1	103	97	75-125	5	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.095	98	95	75-125	3	20	
Chromium	mg/L	0.0012J	0.1	0.1	0.11	0.10	107	102	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	103	101	75-125	3	20	
Copper	mg/L	ND	0.1	0.1	0.10	0.097	101	97	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.093	99	92	75-125	7	20	
Lithium	mg/L	ND	0.1	0.1	0.099	0.097	98	96	75-125	2	20	
Molybdenum	mg/L	0.0019J	0.1	0.1	0.097	0.094	95	92	75-125	3	20	
Nickel	mg/L	ND	0.1	0.1	0.10	0.098	103	98	75-125	5	20	
Selenium	mg/L	ND	0.1	0.1	0.098	0.097	98	97	75-125	1	20	
Silver	mg/L	ND	0.1	0.1	0.092	0.089	92	89	75-125	4	20	
Thallium	mg/L	ND	0.1	0.1	0.10	0.094	100	94	75-125	6	20	
Vanadium	mg/L	ND	0.1	0.1	0.11	0.10	107	103	75-125	4	20	
Zinc	mg/L	ND	0.1	0.1	0.10	0.10	99	99	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645800
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720005, 92558251001, 92558251002

METHOD BLANK: 3387411 Matrix: Water
Associated Lab Samples: 92557720005, 92558251001, 92558251002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/09/21 16:19	
Arsenic	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Barium	mg/L	ND	0.0050	0.00067	09/09/21 16:19	
Beryllium	mg/L	ND	0.00050	0.000054	09/09/21 16:19	
Boron	mg/L	ND	0.040	0.0086	09/09/21 16:19	
Cadmium	mg/L	ND	0.00050	0.00011	09/09/21 16:19	
Chromium	mg/L	ND	0.0050	0.0011	09/09/21 16:19	
Cobalt	mg/L	ND	0.0050	0.00039	09/09/21 16:19	
Lead	mg/L	ND	0.0010	0.00089	09/09/21 16:19	
Lithium	mg/L	ND	0.030	0.00073	09/09/21 16:19	
Molybdenum	mg/L	ND	0.010	0.00074	09/09/21 16:19	
Selenium	mg/L	ND	0.0050	0.0014	09/09/21 16:19	

LABORATORY CONTROL SAMPLE: 3387412

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	107	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.095	95	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	102	80-120	
Lead	mg/L	0.1	0.10	101	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.11	106	80-120	
Selenium	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

Parameter	Units	92557720004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.11	0.11	107	106	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Barium	mg/L	0.049	0.1	0.1	0.15	0.15	102	102	75-125	0	20	
Beryllium	mg/L	0.00019J	0.1	0.1	0.10	0.095	101	95	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3387413 3387414

Parameter	Units	92557720004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	1.3	1	1	2.1	2.1	85	78	75-125	3	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	3	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Lithium	mg/L	0.0026J	0.1	0.1	0.10	0.097	100	94	75-125	6	20	
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.11	104	106	75-125	2	20	
Selenium	mg/L	0.032	0.1	0.1	0.13	0.13	102	103	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646612
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92559527001

METHOD BLANK: 3391827 Matrix: Water
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/14/21 17:25	
Arsenic	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Barium	mg/L	ND	0.0050	0.00067	09/14/21 17:25	
Beryllium	mg/L	ND	0.00050	0.000054	09/14/21 17:25	
Boron	mg/L	ND	0.040	0.0086	09/14/21 17:25	
Cadmium	mg/L	ND	0.00050	0.00011	09/14/21 17:25	
Chromium	mg/L	ND	0.0050	0.0011	09/14/21 17:25	
Cobalt	mg/L	ND	0.0050	0.00039	09/14/21 17:25	
Lead	mg/L	ND	0.0010	0.00089	09/14/21 17:25	
Lithium	mg/L	ND	0.030	0.00073	09/14/21 17:25	
Magnesium	mg/L	ND	0.050	0.0074	09/14/21 17:25	
Molybdenum	mg/L	ND	0.010	0.00074	09/14/21 17:25	
Potassium	mg/L	ND	0.10	0.047	09/14/21 17:25	
Selenium	mg/L	ND	0.0050	0.0014	09/14/21 17:25	
Sodium	mg/L	ND	0.10	0.022	09/14/21 17:25	

LABORATORY CONTROL SAMPLE: 3391828

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.099	99	80-120	
Arsenic	mg/L	0.1	0.099	99	80-120	
Barium	mg/L	0.1	0.096	96	80-120	
Beryllium	mg/L	0.1	0.098	98	80-120	
Boron	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	0.1	0.095	95	80-120	
Chromium	mg/L	0.1	0.094	94	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.094	94	80-120	
Lithium	mg/L	0.1	0.099	99	80-120	
Magnesium	mg/L	1	1.0	104	80-120	
Molybdenum	mg/L	0.1	0.098	98	80-120	
Potassium	mg/L	1	1.0	100	80-120	
Selenium	mg/L	0.1	0.098	98	80-120	
Sodium	mg/L	1	0.99	99	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3391829 3391830

Parameter	Units	92559417001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	100	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.099	100	98	75-125	1	20	
Barium	mg/L	0.028	0.1	0.1	0.13	0.13	98	99	75-125	0	20	
Beryllium	mg/L	0.00016J	0.1	0.1	0.097	0.099	97	98	75-125	2	20	
Boron	mg/L	1.2	1	1	2.3	2.5	92	116	75-125	10	20	
Cadmium	mg/L	ND	0.1	0.1	0.096	0.095	96	95	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	102	101	75-125	0	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.098	101	98	75-125	4	20	
Lead	mg/L	ND	0.1	0.1	0.094	0.095	94	95	75-125	1	20	
Lithium	mg/L	0.0014J	0.1	0.1	0.099	0.10	98	102	75-125	4	20	
Magnesium	mg/L	14.1	1	1	14.0	14.9	-15	74	75-125	6	20	M1
Molybdenum	mg/L	ND	0.1	0.1	0.10	0.10	102	102	75-125	1	20	
Potassium	mg/L	1.7	1	1	2.6	2.7	88	94	75-125	2	20	
Selenium	mg/L	0.021	0.1	0.1	0.12	0.12	100	101	75-125	1	20	
Sodium	mg/L	10	1	1	10.3	10.8	30	81	75-125	5	20	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647371
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

METHOD BLANK: 3395597 Matrix: Water
Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	09/16/21 09:21	
Arsenic	mg/L	ND	0.0050	0.0011	09/16/21 09:21	
Barium	mg/L	ND	0.0050	0.00067	09/16/21 09:21	
Beryllium	mg/L	ND	0.00050	0.000054	09/16/21 09:21	
Boron	mg/L	ND	0.040	0.0086	09/16/21 09:21	
Cadmium	mg/L	ND	0.00050	0.00011	09/16/21 09:21	
Chromium	mg/L	ND	0.0050	0.0011	09/16/21 09:21	
Cobalt	mg/L	ND	0.0050	0.00039	09/16/21 09:21	
Lead	mg/L	ND	0.0010	0.00089	09/16/21 09:21	
Lithium	mg/L	ND	0.030	0.00073	09/16/21 09:21	
Molybdenum	mg/L	ND	0.010	0.00074	09/16/21 09:21	
Selenium	mg/L	ND	0.0050	0.0014	09/16/21 09:21	

LABORATORY CONTROL SAMPLE: 3395598

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.10	101	80-120	
Beryllium	mg/L	0.1	0.094	94	80-120	
Boron	mg/L	1	0.99	99	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	100	80-120	
Lithium	mg/L	0.1	0.10	100	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395599 3395600

Parameter	Units	92558254005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Antimony	mg/L	ND	0.1	0.1	0.10	0.10	101	102	75-125	1	20	
Arsenic	mg/L	0.0016J	0.1	0.1	0.10	0.10	102	100	75-125	2	20	
Barium	mg/L	0.0092	0.1	0.1	0.11	0.11	99	99	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3395599 3395600

Parameter	Units	92558254005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Beryllium	mg/L	ND	0.1	0.1	0.099	0.099	99	99	75-125	0	20	
Boron	mg/L	0.0090J	1	1	0.98	1.0	98	100	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.098	0.10	98	100	75-125	2	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Cobalt	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.097	0.097	97	97	75-125	0	20	
Lithium	mg/L	0.0075J	0.1	0.1	0.11	0.11	101	101	75-125	0	20	
Molybdenum	mg/L	0.0010J	0.1	0.1	0.10	0.10	100	101	75-125	0	20	
Selenium	mg/L	ND	0.1	0.1	0.096	0.089	96	89	75-125	8	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 643872
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557089001, 92557089002, 92557089008

METHOD BLANK: 3378197 Matrix: Water
Associated Lab Samples: 92557089001, 92557089002, 92557089008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	08/31/21 10:48	

LABORATORY CONTROL SAMPLE: 3378198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	87	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3378199 3378200

Parameter	Units	92557081001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0020	0.0020	80	82	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646057
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720005

METHOD BLANK: 3388621 Matrix: Water
Associated Lab Samples: 92557720005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/09/21 16:28	

LABORATORY CONTROL SAMPLE: 3388622

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388623 3388624

Parameter	Units	92557720001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0022	98	88	75-125	12	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 647249
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

METHOD BLANK: 3394978 Matrix: Water
Associated Lab Samples: 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009, 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/15/21 14:08	

LABORATORY CONTROL SAMPLE: 3394979

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3394980 3394981

Parameter	Units	92558254001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0024	95	95	75-125	1	20	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 648334
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559527001

METHOD BLANK: 3400299 Matrix: Water
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	09/21/21 10:38	

LABORATORY CONTROL SAMPLE: 3400300

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0025	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3400301 3400302

Parameter	Units	92560635001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0024	0.0023	92	91	75-125	2	20	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 643142 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3374773 Matrix: Water
Associated Lab Samples: 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/26/21 19:22	

LABORATORY CONTROL SAMPLE: 3374774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	396	99	90-111	

SAMPLE DUPLICATE: 3374775

Parameter	Units	92557073003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	391	407	4	10	

SAMPLE DUPLICATE: 3374776

Parameter	Units	92557089008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	134	144	7	10	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 643454
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557089001, 92557089002

METHOD BLANK: 3376456 Matrix: Water
Associated Lab Samples: 92557089001, 92557089002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/27/21 14:05	

LABORATORY CONTROL SAMPLE: 3376457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	394	98	90-111	

SAMPLE DUPLICATE: 3376458

Parameter	Units	92557088009 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	192	203	6	10	

SAMPLE DUPLICATE: 3376459

Parameter	Units	92555948030 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2040	2150	5	10	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644073 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92557720005, 92558254001, 92558254002, 92558254003, 92558254004

METHOD BLANK: 3379366 Matrix: Water
Associated Lab Samples: 92557720005, 92558254001, 92558254002, 92558254003, 92558254004

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:23	

LABORATORY CONTROL SAMPLE: 3379367

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	408	102	90-111	

SAMPLE DUPLICATE: 3379368

Parameter	Units	92557720003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	822	870	6	10	

SAMPLE DUPLICATE: 3379369

Parameter	Units	92555948054 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	10.0	ND		10	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644074 | Analysis Method: SM 2540C-2011
QC Batch Method: SM 2540C-2011 | Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558251001, 92558251002, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009

METHOD BLANK: 3379370 Matrix: Water
Associated Lab Samples: 92558251001, 92558251002, 92558254005, 92558254006, 92558254007, 92558254008, 92558254009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	08/31/21 16:50	

LABORATORY CONTROL SAMPLE: 3379371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	405	101	90-111	

SAMPLE DUPLICATE: 3379372

Parameter	Units	92558254005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	123	128	4	10	

SAMPLE DUPLICATE: 3379373

Parameter	Units	92558251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	150	151	1	10	

SAMPLE DUPLICATE: 3380417

Parameter	Units	92555945014 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	396	414	4	10	H1

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645434
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92558254014

METHOD BLANK: 3385639 Matrix: Water
Associated Lab Samples: 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/07/21 13:45	

LABORATORY CONTROL SAMPLE: 3385640

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	393	98	90-111	

SAMPLE DUPLICATE: 3385641

Parameter	Units	92558572001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	197	201	2	10	

SAMPLE DUPLICATE: 3385642

Parameter	Units	92558720005 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	39.0	54.0	32	10	R1

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645665
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92559527001

METHOD BLANK: 3386951 Matrix: Water
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	09/08/21 14:20	

LABORATORY CONTROL SAMPLE: 3386952

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	391	98	90-111	

SAMPLE DUPLICATE: 3386953

Parameter	Units	92558259011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	163	174	7	10	

SAMPLE DUPLICATE: 3386954

Parameter	Units	92559417002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	546	557	2	10	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646359
QC Batch Method: SM 2320B-2011
Analysis Method: SM 2320B-2011
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92559527001

METHOD BLANK: 3390347 Matrix: Water
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	5.0	5.0	09/13/21 12:18	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/21 12:18	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	5.0	5.0	09/13/21 12:18	

LABORATORY CONTROL SAMPLE: 3390348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	51.4	103	80-120	

LABORATORY CONTROL SAMPLE: 3390349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.1	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390350 3390351

Parameter	Units	92559892005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	<5.0	50	50	51.8	50.2	104	100	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3390352 3390353

Parameter	Units	92559527001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	13.8	50	50	69.9	70.0	112	112	80-120	0	25	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 644028
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

METHOD BLANK: 3379266 Matrix: Water
Associated Lab Samples: 92557089001, 92557089002, 92557089003, 92557089004, 92557089005, 92557089006, 92557089007, 92557089008, 92557089009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	08/30/21 22:40	
Fluoride	mg/L	ND	0.10	0.050	08/30/21 22:40	
Sulfate	mg/L	ND	1.0	0.50	08/30/21 22:40	

LABORATORY CONTROL SAMPLE: 3379267

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	50.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379268 3379269

Parameter	Units	92558089003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	19300	50	50	4810	17900	-29000	-2800	90-110	115	10	M1,R1
Fluoride	mg/L	6.5J	2.5	2.5	8.5J	8.6J	80	84	90-110		10	M1
Sulfate	mg/L	1340	50	50	1480	1380	263	71	90-110	7	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3379270 3379271

Parameter	Units	92557089004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.0	50	50	56.3	58.9	103	108	90-110	5	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.7	102	107	90-110	4	10	
Sulfate	mg/L	6.7	50	50	58.8	61.3	104	109	90-110	4	10	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645268
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92557720005, 92558251001, 92558251002, 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008

METHOD BLANK: 3385176 Matrix: Water
Associated Lab Samples: 92557720005, 92558251001, 92558251002, 92558254001, 92558254002, 92558254003, 92558254004, 92558254005, 92558254006, 92558254007, 92558254008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/05/21 23:01	
Fluoride	mg/L	ND	0.10	0.050	09/05/21 23:01	
Sulfate	mg/L	ND	1.0	0.50	09/05/21 23:01	

LABORATORY CONTROL SAMPLE: 3385177

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.2	98	90-110	
Fluoride	mg/L	2.5	2.3	94	90-110	
Sulfate	mg/L	50	50.9	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385178 3385179

Parameter	Units	92555948053 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	274	50	50	326	328	105	109	90-110	1	10	
Fluoride	mg/L	0.15	2.5	2.5	3.6	3.6	139	139	90-110	0	10	M1
Sulfate	mg/L	285	50	50	344	347	119	124	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385180 3385181

Parameter	Units	92558251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	0.99J	50	50	66.4	67.0	131	132	90-110	1	10	M1
Fluoride	mg/L	0.12	2.5	2.5	3.4	3.4	133	132	90-110	0	10	M1
Sulfate	mg/L	16.7	50	50	85.1	85.4	137	137	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645269
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558254009

METHOD BLANK: 3385184 Matrix: Water
Associated Lab Samples: 92558254009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/06/21 06:59	
Fluoride	mg/L	ND	0.10	0.050	09/06/21 06:59	
Sulfate	mg/L	ND	1.0	0.50	09/06/21 06:59	

LABORATORY CONTROL SAMPLE: 3385185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.5	99	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	51.0	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385186 3385187

Parameter	Units	92558254009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.8	50	50	68.7	69.4	132	133	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	3.3	3.3	130	130	90-110	0	10	M1
Sulfate	mg/L	ND	50	50	69.3	69.9	138	140	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385188 3385189

Parameter	Units	92558560001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.8	50	50	67.3	67.5	107	107	90-110	0	10	
Fluoride	mg/L	0.29	2.5	2.5	3.0	3.0	110	109	90-110	1	10	
Sulfate	mg/L	27.9	50	50	82.7	82.7	110	110	90-110	0	10	

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QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 645412
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92558254014

METHOD BLANK: 3385548 Matrix: Water
Associated Lab Samples: 92558254014

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/08/21 05:04	
Fluoride	mg/L	ND	0.10	0.050	09/08/21 05:04	
Sulfate	mg/L	ND	1.0	0.50	09/08/21 05:04	

LABORATORY CONTROL SAMPLE: 3385549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	49.7	99	90-110	
Fluoride	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	50.8	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385550 3385551

Parameter	Units	92559210006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9	50	50	57.8	55.9	110	106	90-110	3	10	
Fluoride	mg/L	ND	2.5	2.5	2.8	2.7	109	105	90-110	3	10	
Sulfate	mg/L	ND	50	50	54.9	54.2	108	107	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3385552 3385553

Parameter	Units	92559417003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.3	50	50	57.3	56.1	108	106	90-110	2	10	
Fluoride	mg/L	ND	2.5	2.5	2.6	2.6	105	102	90-110	3	10	
Sulfate	mg/L	1.3	50	50	56.2	55.0	110	107	90-110	2	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES UPGRADIENT
Pace Project No.: 92557089

QC Batch: 646087
QC Batch Method: EPA 300.0 Rev 2.1 1993
Analysis Method: EPA 300.0 Rev 2.1 1993
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92559527001

METHOD BLANK: 3388785 Matrix: Water
Associated Lab Samples: 92559527001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/10/21 03:14	
Fluoride	mg/L	ND	0.10	0.050	09/10/21 03:14	
Sulfate	mg/L	ND	1.0	0.50	09/10/21 03:14	

LABORATORY CONTROL SAMPLE: 3388786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	51.4	103	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	52.9	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388787 3388788

Parameter	Units	92560111002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.9	50	50	60.1	60.7	109	110	90-110	1	10	
Fluoride	mg/L	ND	2.5	2.5	1.2	1.1	47	43	90-110	7	10	M1
Sulfate	mg/L	ND	50	50	57.6	58.0	114	115	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3388789 3388790

Parameter	Units	92559452001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.6	50	50	69.0	69.3	107	107	90-110	0	10	
Fluoride	mg/L		2.5	2.5	3.2	3.2	105	105	90-110	0	10	
Sulfate	mg/L		50	50	73.2	73.4	111	111	90-110	0	10	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES UPGRADIENT
Pace Project No.: 92557089

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557089002	**GWA-2**				
92557089003	**YGWA-14S**				
92557089005	**YGWA-1D**				
92557089006	**YGWA-1I**				
92557089007	**YGWA-3D**				
92557089008	**YGWA-47**				
92557089009	**YGWA-30I**				
92557720005	**YGWA-39**				
92558251001	**YGWA-2I**				
92558251002	**YGWA-3I**				
92558254002	**YGWA-4I**				
92558254003	**YGWA-5I**				
92558254005	**YGWA-5D**				
92558254006	**YGWA-17S**				
92558254007	**YGWA-18S**				
92558254008	**YGWA-18I**				
92558254009	**YGWA-20S**				
92558254014	**YGWA-21I**				
92559527001	**YGWA-40**				
92557089001	**UP-DUP-1**	EPA 3010A	644090	EPA 6010D	644167
92557089002	**GWA-2**	EPA 3010A	644090	EPA 6010D	644167
92557089003	**YGWA-14S**	EPA 3010A	644090	EPA 6010D	644167
92557089004	**UP-DUP-2**	EPA 3010A	644090	EPA 6010D	644167
92557089005	**YGWA-1D**	EPA 3010A	644090	EPA 6010D	644167
92557089006	**YGWA-1I**	EPA 3010A	644090	EPA 6010D	644167
92557089007	**YGWA-3D**	EPA 3010A	644090	EPA 6010D	644167
92557089008	**YGWA-47**	EPA 3010A	644090	EPA 6010D	644167
92557089009	**YGWA-30I**	EPA 3010A	644090	EPA 6010D	644167
92557720005	**YGWA-39**	EPA 3010A	645799	EPA 6010D	646162
92558251001	**YGWA-2I**	EPA 3010A	644451	EPA 6010D	644531
92558251002	**YGWA-3I**	EPA 3010A	644451	EPA 6010D	644531
92558254001	**UP-FB-2**	EPA 3010A	647011	EPA 6010D	647060
92558254002	**YGWA-4I**	EPA 3010A	647336	EPA 6010D	647380
92558254003	**YGWA-5I**	EPA 3010A	647336	EPA 6010D	647380
92558254004	**UP-DUP-3**	EPA 3010A	647336	EPA 6010D	647380
92558254005	**YGWA-5D**	EPA 3010A	647336	EPA 6010D	647380
92558254006	**YGWA-17S**	EPA 3010A	647336	EPA 6010D	647380
92558254007	**YGWA-18S**	EPA 3010A	647336	EPA 6010D	647380
92558254008	**YGWA-18I**	EPA 3010A	647336	EPA 6010D	647380
92558254009	**YGWA-20S**	EPA 3010A	647336	EPA 6010D	647380
92558254014	**YGWA-21I**	EPA 3010A	647336	EPA 6010D	647380
92559527001	**YGWA-40**	EPA 3010A	646610	EPA 6010D	646635
92557089001	**UP-DUP-1**	EPA 3005A	644091	EPA 6020B	644223
92557089002	**GWA-2**	EPA 3005A	644091	EPA 6020B	644223
92557089003	**YGWA-14S**	EPA 3005A	644091	EPA 6020B	644223

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557089004	**UP-DUP-2**	EPA 3005A	644091	EPA 6020B	644223
92557089005	**YGWA-1D**	EPA 3005A	644091	EPA 6020B	644223
92557089006	**YGWA-1I**	EPA 3005A	644091	EPA 6020B	644223
92557089007	**YGWA-3D**	EPA 3005A	644091	EPA 6020B	644223
92557089008	**YGWA-47**	EPA 3005A	644091	EPA 6020B	644223
92557089009	**YGWA-30I**	EPA 3005A	644091	EPA 6020B	644223
92557720005	**YGWA-39**	EPA 3005A	645800	EPA 6020B	646175
92558251001	**YGWA-2I**	EPA 3005A	645800	EPA 6020B	646175
92558251002	**YGWA-3I**	EPA 3005A	645800	EPA 6020B	646175
92558254001	**UP-FB-2**	EPA 3005A	647371	EPA 6020B	647475
92558254002	**YGWA-4I**	EPA 3005A	647371	EPA 6020B	647475
92558254003	**YGWA-5I**	EPA 3005A	647371	EPA 6020B	647475
92558254004	**UP-DUP-3**	EPA 3005A	647371	EPA 6020B	647475
92558254005	**YGWA-5D**	EPA 3005A	647371	EPA 6020B	647475
92558254006	**YGWA-17S**	EPA 3005A	647371	EPA 6020B	647475
92558254007	**YGWA-18S**	EPA 3005A	647371	EPA 6020B	647475
92558254008	**YGWA-18I**	EPA 3005A	647371	EPA 6020B	647475
92558254009	**YGWA-20S**	EPA 3005A	647371	EPA 6020B	647475
92558254014	**YGWA-21I**	EPA 3005A	647371	EPA 6020B	647475
92559527001	**YGWA-40**	EPA 3005A	646612	EPA 6020B	646637
92557089001	**UP-DUP-1**	EPA 7470A	643872	EPA 7470A	643926
92557089002	**GWA-2**	EPA 7470A	643872	EPA 7470A	643926
92557089008	**YGWA-47**	EPA 7470A	643872	EPA 7470A	643926
92557720005	**YGWA-39**	EPA 7470A	646057	EPA 7470A	646168
92558254001	**UP-FB-2**	EPA 7470A	647249	EPA 7470A	647342
92558254002	**YGWA-4I**	EPA 7470A	647249	EPA 7470A	647342
92558254003	**YGWA-5I**	EPA 7470A	647249	EPA 7470A	647342
92558254004	**UP-DUP-3**	EPA 7470A	647249	EPA 7470A	647342
92558254005	**YGWA-5D**	EPA 7470A	647249	EPA 7470A	647342
92558254006	**YGWA-17S**	EPA 7470A	647249	EPA 7470A	647342
92558254007	**YGWA-18S**	EPA 7470A	647249	EPA 7470A	647342
92558254008	**YGWA-18I**	EPA 7470A	647249	EPA 7470A	647342
92558254009	**YGWA-20S**	EPA 7470A	647249	EPA 7470A	647342
92558254014	**YGWA-21I**	EPA 7470A	647249	EPA 7470A	647342
92559527001	**YGWA-40**	EPA 7470A	648334	EPA 7470A	648431
92557089001	**UP-DUP-1**	SM 2540C-2011	643454		
92557089002	**GWA-2**	SM 2540C-2011	643454		
92557089003	**YGWA-14S**	SM 2540C-2011	643142		
92557089004	**UP-DUP-2**	SM 2540C-2011	643142		
92557089005	**YGWA-1D**	SM 2540C-2011	643142		
92557089006	**YGWA-1I**	SM 2540C-2011	643142		
92557089007	**YGWA-3D**	SM 2540C-2011	643142		
92557089008	**YGWA-47**	SM 2540C-2011	643142		
92557089009	**YGWA-30I**	SM 2540C-2011	643142		

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT
Pace Project No.: 92557089

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557720005	**YGWA-39**	SM 2540C-2011	644073		
92558251001	**YGWA-2I**	SM 2540C-2011	644074		
92558251002	**YGWA-3I**	SM 2540C-2011	644074		
92558254001	**UP-FB-2**	SM 2540C-2011	644073		
92558254002	**YGWA-4I**	SM 2540C-2011	644073		
92558254003	**YGWA-5I**	SM 2540C-2011	644073		
92558254004	**UP-DUP-3**	SM 2540C-2011	644073		
92558254005	**YGWA-5D**	SM 2540C-2011	644074		
92558254006	**YGWA-17S**	SM 2540C-2011	644074		
92558254007	**YGWA-18S**	SM 2540C-2011	644074		
92558254008	**YGWA-18I**	SM 2540C-2011	644074		
92558254009	**YGWA-20S**	SM 2540C-2011	644074		
92558254014	**YGWA-21I**	SM 2540C-2011	645434		
92559527001	**YGWA-40**	SM 2540C-2011	645665		
92559527001	**YGWA-40**	SM 2320B-2011	646359		
92557089001	**UP-DUP-1**	EPA 300.0 Rev 2.1 1993	644028		
92557089002	**GWA-2**	EPA 300.0 Rev 2.1 1993	644028		
92557089003	**YGWA-14S**	EPA 300.0 Rev 2.1 1993	644028		
92557089004	**UP-DUP-2**	EPA 300.0 Rev 2.1 1993	644028		
92557089005	**YGWA-1D**	EPA 300.0 Rev 2.1 1993	644028		
92557089006	**YGWA-1I**	EPA 300.0 Rev 2.1 1993	644028		
92557089007	**YGWA-3D**	EPA 300.0 Rev 2.1 1993	644028		
92557089008	**YGWA-47**	EPA 300.0 Rev 2.1 1993	644028		
92557089009	**YGWA-30I**	EPA 300.0 Rev 2.1 1993	644028		
92557720005	**YGWA-39**	EPA 300.0 Rev 2.1 1993	645268		
92558251001	**YGWA-2I**	EPA 300.0 Rev 2.1 1993	645268		
92558251002	**YGWA-3I**	EPA 300.0 Rev 2.1 1993	645268		
92558254001	**UP-FB-2**	EPA 300.0 Rev 2.1 1993	645268		
92558254002	**YGWA-4I**	EPA 300.0 Rev 2.1 1993	645268		
92558254003	**YGWA-5I**	EPA 300.0 Rev 2.1 1993	645268		
92558254004	**UP-DUP-3**	EPA 300.0 Rev 2.1 1993	645268		
92558254005	**YGWA-5D**	EPA 300.0 Rev 2.1 1993	645268		
92558254006	**YGWA-17S**	EPA 300.0 Rev 2.1 1993	645268		
92558254007	**YGWA-18S**	EPA 300.0 Rev 2.1 1993	645268		
92558254008	**YGWA-18I**	EPA 300.0 Rev 2.1 1993	645268		
92558254009	**YGWA-20S**	EPA 300.0 Rev 2.1 1993	645269		
92558254014	**YGWA-21I**	EPA 300.0 Rev 2.1 1993	645412		
92559527001	**YGWA-40**	EPA 300.0 Rev 2.1 1993	646087		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2010 Page 1 of 2
	Document No: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO# : 92557089**

92557089

Courier: ☐ Commercial ☐ FedEx ☐ UPS ☐ USPS ☐ Other ☑ Client

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/23/11 KW

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID 083 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 1.6 Correction Factor: Add/Subtract (°C) 0.4

Cooler Temp Corrected (°C): 2.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	3
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5
Correct Containers Used? -Pace Containers Used?	☑ Yes	☐ No	☐ N/A	6
Containers Intact?	☑ Yes	☐ No	☐ N/A	7
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: W	☐ Yes	☑ No	☐ N/A	9 EB-1 + FB-1 collection time not listed on the bottle but collection time is listed on the WO. work order
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page 1 of [illegible]

Section A: Required Client Information		Section B: Required Project Information		Section C: Invoice Information	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
Email To:	SCS and Arcadis Contacts	Purchase Order #:		Address:	
Phone:		Project Name:	[illegible]	Pace Quote:	
Requested Due Date:	10 Day	Project Number:		Pace Project Manager:	Kevin Herring [illegible]
				Pace Profile #:	[illegible]

Regulatory Agency: [illegible]

State / Location: [illegible]

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analyses Test	Residual Chlorine (Y/N)	
1	[illegible]	WT	G	[illegible]	—					[illegible]	x x x x x x x		5.86
2	[illegible]	WT	G	[illegible]	[illegible]				5	[illegible]	x x x x x x x		5.56
3		WT	G										
4		WT	G										
5		WT	G										
6		WT	G										
7		WT	G										
8		WT	G										
9													
10													
11													
12													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
[illegible]	[signature]	[illegible]	[illegible]	[signature]	[illegible]	[illegible]	[illegible]	Y	N	Y
[illegible]										
[illegible]										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [handwritten name]

SIGNATURE of SAMPLER: [signature]

DATE Signed: [illegible]

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Base Terms and Conditions found at eurofinsus.com/hubspan-standard-terms.pdf

Page: 2 of 11

Section A — Client Information

Section B — Required Project Information

Section C — Invoice Information

Regulatory Agency

State / Location: CA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9, /, -, _) Sample IDs must be unique)	MATRIX	SAMPLE TYPE	COLLECTED DATE	COLLECTED TIME	# OF CONTAINERS	Preservatives	TVH	Analyses Test	Requested Analysis Filtered (Y/N)	SAMPLE COMMENTS
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER:

DATE Signed: 8/19/21

TEMP in °C | Received | Custody Seals Intact | Cooler Temp | Temp Blank

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 2 of 4

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company:	Report To:	Attention:
Address:	Copy To:	Company Name:
Atlanta, GA		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name:	Pace Project Manager:
Requested Due Date:	Project #:	Pace Profile #:

Regulatory Agency

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Residual Chlorine (Y/N)
1	[illegible]	WT			1110							✓						X	X	X	X	—
2	[illegible]	WT																X	X	X	X	
3	[illegible]	WT		8/17	1510							✓						X	X	X	X	—
4	[illegible]	WT																X	X	X	X	
5	[illegible]	WT																X	X	X	X	
6	[illegible]	WT																X	X	X	X	
7	[illegible]	WT																X	X	X	X	
8	[illegible]	WT																X	X	X	X	
9	[illegible]	WT																X	X	X	X	
10	YGWA-14S	WT		8/17					4	✓		✓						X	X	X	X	pH: 7.32
11	[illegible]	WT		8/17	—				4	✓		✓						X	X	X	X	—
12	YGWA-30I	WT		8/18	1220				4	✓		✓						X	X	X	X	pH: 5.43

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]		1730	[signature]	8/18/22	1743	9.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [signature]

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/18/22

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 4

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power	Report To: SCS Contacts	Attention: Southnet Co
Address: Atlanta, GA	Copy To: Arcadis Contacts	Company Name:
	Purchase Order #	Address:
Email To: SCS and Arcadis Contacts	Project Name:	Pace Quote:
Phone: Fax:	Project Number:	Pace Project Manager: Kevin Henning Nicole Dolce
Requested Due Date: 10 Day		Pace Profile #:

Regulatory Agency
GDR
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9, / , -) Samples IDs MUST be unique)	MATRIX (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	Preservatives	Analyses Test	Residual Chlorine (Y/N)	Requested Analysis Filtered (Y/N)	Total Number of Containers	Pace Project No. / Lab I.D.
1														
2														
3														
4														
5	YGWA-1D			5/1	1410									6.32
6	YGWA-1S			5/1	1345									6.38
7	YGWA-3D			5/1	1446									5.34
8														
9														
10														
11														
12														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/20	1730				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Cook

SIGNATURE of SAMPLER: [signature] DATE Signed: 5/20/15

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 4 of 4

Section A – Required Client Information

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	
Requested Due Date:	10 Day

Section B – Required Project Information

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	[illegible]
Project Number:	

Section C – Invoice Information

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring
Pace Profile #:	[illegible]

Regulatory Agency	CCR
State / Location	GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	Preservatives	Analyses Test	Residual Chlorine (Y/N)
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	X, X	[illegible]	5.50
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Y / N / Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92557720

PM: NMG Due Date: 09/09/21

CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CAH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: Q83 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : Of

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-RS (downgradient)
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency	
CCR	
State / Location	
GA	

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals	App IV Metals (App 1)	Radium 226/228	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)	Residual Chlorine (Y/N)
1	[illegible]	WT	G																x	x	x	x	x			x	pH
2	[illegible]	WT	G	8/26/21	[illegible]					2		3							x	x	x	x	x			x	pH 6.91
3	[illegible]	WT	G																x	x	x	x	x			x	pH
4		WT	G																								
5		WT	G																								
6		WT	G																								
7		WT	G																								
8		WT	G																								
9		WT	G																								
10		WT	G																								
11		WT	G																								
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature]	8/26/21	1410	[signature]	8/26	1410	
App III Metals: Boron 6020, Ca 6010	[signature]	8/27	1640	[signature]	8/27/21	1640	
App IV Metals 6020: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Kolowicz

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-26-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558251

92558251

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 3/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): 3.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of

Section A
Required Client Information:

Company: Georgia Power
Address: Atlanta, GA
Email To: SCS and Arcadis Contacts
Phone: Fax:
Requested Due Date: 10 Day

Section B
Required Project Information:

Report To: SCS Contacts
Copy To: Arcadis Contacts
Purchase Order #:
Project Name: Yates AP-2 (upgradient)
Project Number:

Section C
Invoice Information:

Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring/Nicole D'Olier
Pace Profile #: 10640

Regulatory Agency: GDR
State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test	Y/N	TDS (A2540)	Arsenic Suite 3010	App IV Metals	App IV Metals (Ha Hg)	Radium 226/228 (9315/9320)	Residual Chlorine (Y/N)	
	YGWA-2	WATER		5/2/17	1533				7	X		X								X	X	X	X	X	
	YGWA-3	WATER		5/2/17	1557				7	X		X								X	X	X	X	X	

		DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Arsenic Suite 3010 (Cl, F, Sulfate)	Mueller	5/2/17	1710		5/2/17	1710	
App III Metals, Boron (B208), Ca (6010)		5/2/17	1840		5/2/17	1840	
App IV Metals (6020): Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Cheek

SIGNATURE of SAMPLER: [signature] DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558254

92558254

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0 Type of Ice:

Cooler Temp Corrected (°C): 3.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☑ No	☐ N/A	9. AMA-EB-1 labeled 4P-EB-1 but time matches 8/26/21 1600
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at [illegible]

Page : 1 Of 1

Section A — Required Client Information:
Company: Georgia Power
Address: [illegible]
Suite [illegible], Atlanta, GA [illegible]
Email:
Phone: | Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: [illegible]
Copy To:
Purchase Order #:
Project Name: [illegible]
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	ABMA-ES-1	WT																x	x	x	x			
2	ABMA-ES-2	WT																x	x	x	x			
3	ABMA-FB-1	WT																x	x	x	x			
4	ABMA-FB-2	WT																x	x	x	x			
5	UP-ES-1	WT																x	x	x	x			
6	UP-FB-1	WT		[illegible]	1710				5	X		X						x	x	x	x			
7	~~[illegible]~~	WT																x	x	x	x			
8	UP-FB-2	WT																x	x	x	x			
9	YGWA-4I	WT		[illegible]	[illegible]				5	X		X						x	x	x	x			5.82
10	YGWA-5I	WT		[illegible]	1628				5	X		X						x	x	x	x			5.51 SU
11	UP-DUP-3	WT		[illegible]	–				5	X		X						x	x	x	x			–
12	YGWA-5D	WT		[illegible]	1335				5	X		X						x	x	x	x			7.16 SU

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	[illegible]	1640	[signature]	[illegible]	[illegible]	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Mark Chest
SIGNATURE of SAMPLER: [signature]
DATE Signed: 5/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at [illegible]

Page : 2 Of 2

Section A — Required Client Information	Section B — Required Project Information	Section C — Invoice Information
Company: Arcadis (GA Power)	Report To: [illegible]	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates [illegible]	Pace Project Manager: [illegible]
Requested Due Date:	Project #:	Pace Profile #: [illegible]

Regulatory Agency:

State / Location: GA

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	Collected Start Date	Collected Start Time	End Date	End Time	Sample Temp at Collection	# of Containers	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1045				5	✓		✓						X	X	X	X			Ph: 5.27
14	~~[illegible]~~ YGWA-18S	WT		8/28	1535				5	✓		✓						X	X	X	X			Ph: 4.40
15	YGWA-18I	WT		8/27	0955				5	✓		✓						X	X	X	X			Ph: 5.40
16	YGWA-20S	WT		8/27	1310				5	✓		✓						X	X	X	X			Ph: 5.57
17	YGWA-21I	WT																X	X	X	X			
18	YGWC-23S	WT																X	X	X	X	X		
19	YGWC-24SA	WT																X	X	X	X			
20	AMA-DUP-1	WT																X	X	X	X			
21	YGWC-36A	WT																X	X	X	X	X		
22	YGWC-49	WT																X	X	X	X			
23	AMA-EB-1			8/26	1600				5									X	X	X	X			
24	AMA-EB-2			8/27	1340				5									X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Arcadis	8/27		[signature]	8/27	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

Temp in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92558254**

PM: NMG Due Date: 09/13/21
CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/24/21 KBM

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : Of

Section A Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B Required Project Information:

Report To:	[redacted]
Copy To:	[redacted]
Purchase Order #:	
Project Name:	[redacted]
Project Number:	

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency
CCR
State / Location
GA

SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (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	TDS 2450C	Anions Sulfa 300.0	App III Metals	App. IV Metals (No Ti)	Radium 226/228 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)	
1	[redacted]	WT	G															x	x	x	x	x				
2	[redacted]	WT	G															x	x	x	x	x				
3	[redacted]	WT	G															x	x	x	x	x				
4	[redacted]	WT	G															x	x	x	x	x				
5	[redacted]	WT	G															x	x	x	x	x				
6	[redacted]	WT	G															x	x	x	x	x	x			
7	[redacted]	WT	G		-													x	x	x	x	x				
8	[redacted]	WT	G															x	x	x	x	x				
9	[redacted]	WT	G															x	x	x	x	x				
10	[redacted] ARA-DUP-1	WT	G	9/1	—				5	✓		✓						x	x	x	x	x	6/6			
11	[redacted] YGWC-49A	WT	G	9/1	1025				5	✓		✓						x	x	x	x	x	6/6			pH 5.22
12	[redacted] YGWA-21I	WT	G	9/1	1140				5	✓		✓						x	x	x	x	x				pH 6.65

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Sulfa 300.0 (Cl,F, sulfate)	[signature] /Arcadis	9/2/21	1530	[signature] / Arcadis	9/2/21	1530	
App III Metals: Boron 6020B,Ca 6010D	[signature]	9/2/21	1702	[signature] / PACE	9/2/21	1702	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: ARCADIS - GAlower

Project

WO# : 92559527

92559527

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/3/19 CR

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.9 Correction Factor: Add/Subtract (°C) +0.1

Cooler Temp Corrected (°C): 5.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	WT			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: [illegible]	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates RB	Pace Project Manager: [illegible]@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: 10840

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)
1	[illegible]	WT																	X	X		X	X	X	
2	[illegible]	WT		7/6/[illegible]	[illegible]														X	X		X	X	X	415
3	[illegible]	WT																	X	X		X	X	X	
4	[illegible]	WT																	X	X		X	X	X	
5	[illegible]	WT																	X	X		X	X	X	
6	[illegible]	WT																	X	X			X		
7	[illegible]	WT																	X	X		X	X	X	
8	[illegible]	WT																			X				
9	[illegible]	WT																			X				
10	[illegible]	WT																			X				
11	[illegible]	WT																			X				
12	[illegible]	WT																			X				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / ARS	9/3/20	1730	[signature] / PACE	9/3/21	1725	4.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible] Choat

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/3/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

October 01, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 20, 2021 and September 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92557070001	**UP-DUP-1**	Water	08/20/21 00:00	08/20/21 17:30
92557070002	**GWA-2**	Water	08/20/21 12:00	08/20/21 17:30
92557070003	**YGWA-14S**	Water	08/19/21 11:00	08/20/21 17:30
92557070004	**UP-DUP-2**	Water	08/19/21 00:00	08/20/21 17:30
92557070005	**YGWA-1D**	Water	08/19/21 11:10	08/20/21 17:30
92557070006	**YGWA-1I**	Water	08/19/21 12:49	08/20/21 17:30
92557070007	**YGWA-3D**	Water	08/19/21 14:45	08/20/21 17:30
92557070008	**YGWA-47**	Water	08/19/21 10:26	08/20/21 17:30
92557070009	**YGWA-30I**	Water	08/19/21 12:20	08/20/21 17:30
92557719005	**YGWA-39**	Water	08/26/21 12:30	08/27/21 16:40
92558240001	**UP-FB-2**	Water	08/26/21 17:10	08/27/21 16:40
92558240002	**YGWA-4I**	Water	08/26/21 11:29	08/27/21 16:40
92558240003	**YGWA-5I**	Water	08/26/21 16:28	08/27/21 16:40
92558240004	**UP-DUP-3**	Water	08/26/21 00:00	08/27/21 16:40
92558240005	**YGWA-5D**	Water	08/26/21 13:35	08/27/21 16:40
92558240006	**YGWA-17S**	Water	08/27/21 10:45	08/27/21 16:40
92558240007	**YGWA-18S**	Water	08/26/21 15:35	08/27/21 16:40
92558240008	**YGWA-18I**	Water	08/27/21 09:35	08/27/21 16:40
92558240009	**YGWA-20S**	Water	08/27/21 13:10	08/27/21 16:40
92558240014	**YGWA-21I**	Water	09/01/21 14:40	09/02/21 17:02
92559523001	**YGWA-40**	Water	09/03/21 10:20	09/03/21 17:30
92558238001	**YGWA-2I**	Water	08/27/21 11:33	08/27/21 16:40
92558238002	**YGWA-3I**	Water	08/27/21 09:55	08/27/21 16:40

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92557070001	**UP-DUP-1**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070002	**GWA-2**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070003	**YGWA-14S**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070004	**UP-DUP-2**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070005	**YGWA-1D**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070006	**YGWA-1I**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070007	**YGWA-3D**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070008	**YGWA-47**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557070009	**YGWA-30I**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92557719005	**YGWA-39**	EPA 9315	CLA	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240001	**UP-FB-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240002	**YGWA-4I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240003	**YGWA-5I**	EPA 9315	LAL	1	PASI-PA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240004	**UP-DUP-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240005	**YGWA-5D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240006	**YGWA-17S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240007	**YGWA-18S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240008	**YGWA-18I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240009	**YGWA-20S**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240014	**YGWA-21I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92559523001	**YGWA-40**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558238001	**YGWA-2I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558238002	**YGWA-3I**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557070001	**UP-DUP-1**					
EPA 9315	Radium-226	0.325 ± 0.195 (0.307) C:88% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	0.333 ± 0.342 (0.704) C:73% T:85%	pCi/L		09/17/21 14:11	
Total Radium Calculation	Total Radium	0.658 ± 0.537 (1.01)	pCi/L		09/21/21 16:29	
92557070002	**GWA-2**					
EPA 9315	Radium-226	0.0454 ± 0.104 (0.246) C:86% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	0.483 ± 0.364 (0.713) C:74% T:88%	pCi/L		09/17/21 14:11	
Total Radium Calculation	Total Radium	0.528 ± 0.468 (0.959)	pCi/L		09/21/21 16:29	
92557070003	**YGWA-14S**					
EPA 9315	Radium-226	0.00466 ± 0.157 (0.433) C:93% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	0.781 ± 0.436 (0.776) C:74% T:80%	pCi/L		09/17/21 14:03	
Total Radium Calculation	Total Radium	0.786 ± 0.593 (1.21)	pCi/L		09/21/21 16:29	
92557070004	**UP-DUP-2**					
EPA 9315	Radium-226	0.111 ± 0.167 (0.360) C:99% T:NA	pCi/L		09/20/21 15:28	
EPA 9320	Radium-228	1.08 ± 0.491 (0.804) C:74% T:78%	pCi/L		09/17/21 14:03	
Total Radium Calculation	Total Radium	1.19 ± 0.658 (1.16)	pCi/L		09/21/21 16:29	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557070005	**YGWA-1D**					
EPA 9315	Radium-226	0.276 ± 0.229 (0.401) C:93% T:NA	pCi/L		09/20/21 15:29	
EPA 9320	Radium-228	0.894 ± 0.489 (0.876) C:74% T:84%	pCi/L		09/17/21 14:25	
Total Radium Calculation	Total Radium	1.17 ± 0.718 (1.28)	pCi/L		09/21/21 16:29	
92557070006	**YGWA-1I**					
EPA 9315	Radium-226	0.0732 ± 0.237 (0.573) C:99% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	-0.218 ± 0.601 (1.45) C:73% T:84%	pCi/L		09/17/21 17:11	
Total Radium Calculation	Total Radium	0.0732 ± 0.838 (2.02)	pCi/L		09/21/21 16:29	
92557070007	**YGWA-3D**					
EPA 9315	Radium-226	1.67 ± 0.511 (0.447) C:93% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	1.86 ± 0.774 (1.22) C:70% T:83%	pCi/L		09/17/21 17:11	
Total Radium Calculation	Total Radium	3.53 ± 1.29 (1.67)	pCi/L		09/21/21 16:29	
92557070008	**YGWA-47**					
EPA 9315	Radium-226	0.309 ± 0.197 (0.329) C:88% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	0.757 ± 0.724 (1.50) C:68% T:81%	pCi/L		09/17/21 17:12	
Total Radium Calculation	Total Radium	1.07 ± 0.921 (1.83)	pCi/L		09/21/21 16:29	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
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(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92557070009	**YGWA-30I**					
EPA 9315	Radium-226	0.234 ± 0.232 (0.450) C:95% T:NA	pCi/L		09/21/21 08:07	
EPA 9320	Radium-228	-0.0548 ± 0.544 (1.29) C:67% T:77%	pCi/L		09/17/21 17:12	
Total Radium Calculation	Total Radium	0.234 ± 0.776 (1.74)	pCi/L		09/21/21 16:29	
92557719005	**YGWA-39**					
EPA 9315	Radium-226	0.674 ± 0.261 (0.318) C:90% T:NA	pCi/L		09/21/21 09:36	
EPA 9320	Radium-228	-0.0610 ± 0.461 (1.09) C:74% T:82%	pCi/L		09/17/21 17:18	
Total Radium Calculation	Total Radium	0.674 ± 0.722 (1.41)	pCi/L		09/22/21 16:02	
92558240001	**UP-FB-2**					
EPA 9315	Radium-226	0.0312 ± 0.148 (0.376) C:98% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.327 ± 0.417 (0.886) C:79% T:79%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.358 ± 0.565 (1.26)	pCi/L		09/24/21 14:36	
92558240002	**YGWA-4I**					
EPA 9315	Radium-226	0.752 ± 0.313 (0.359) C:94% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.419 ± 0.429 (0.888) C:82% T:80%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	1.17 ± 0.742 (1.25)	pCi/L		09/24/21 14:36	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558240003	**YGWA-5I**					
EPA 9315	Radium-226	0.173 ± 0.181 (0.351) C:91% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.625 ± 0.402 (0.752) C:81% T:80%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.798 ± 0.583 (1.10)	pCi/L		09/24/21 14:36	
92558240004	**UP-DUP-3**					
EPA 9315	Radium-226	0.101 ± 0.197 (0.455) C:96% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.620 ± 0.425 (0.816) C:81% T:80%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.721 ± 0.622 (1.27)	pCi/L		09/24/21 14:36	
92558240005	**YGWA-5D**					
EPA 9315	Radium-226	3.80 ± 0.816 (0.373) C:102% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.883 ± 0.429 (0.726) C:80% T:82%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	4.68 ± 1.25 (1.10)	pCi/L		09/24/21 14:36	
92558240006	**YGWA-17S**					
EPA 9315	Radium-226	0.438 ± 0.263 (0.394) C:86% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.462 ± 0.373 (0.739) C:81% T:81%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.900 ± 0.636 (1.13)	pCi/L		09/24/21 14:36	

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SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558240007	**YGWA-18S**					
EPA 9315	Radium-226	0.145 ± 0.161 (0.309) C:95% T:NA	pCi/L		09/22/21 08:47	
EPA 9320	Radium-228	0.541 ± 0.396 (0.768) C:77% T:84%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.686 ± 0.557 (1.08)	pCi/L		09/24/21 14:36	
92558240008	**YGWA-18I**					
EPA 9315	Radium-226	0.104 ± 0.171 (0.381) C:97% T:NA	pCi/L		09/22/21 08:45	
EPA 9320	Radium-228	0.657 ± 0.507 (1.01) C:73% T:84%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.761 ± 0.678 (1.39)	pCi/L		09/24/21 14:36	
92558240009	**YGWA-20S**					
EPA 9315	Radium-226	0.632 ± 0.313 (0.451) C:95% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	0.147 ± 0.402 (0.898) C:74% T:84%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.779 ± 0.715 (1.35)	pCi/L		09/24/21 14:36	
92558240014	**YGWA-21I**					
EPA 9315	Radium-226	0.934 ± 0.290 (0.223) C:90% T:NA	pCi/L		09/22/21 09:39	
EPA 9320	Radium-228	0.924 ± 0.466 (0.823) C:76% T:81%	pCi/L		09/20/21 11:13	
Total Radium Calculation	Total Radium	1.86 ± 0.756 (1.05)	pCi/L		09/27/21 15:44	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92559523001	**YGWA-40**					
EPA 9315	Radium-226	0.350 ± 0.172 (0.206) C:91% T:NA	pCi/L		09/22/21 09:39	
EPA 9320	Radium-228	0.621 ± 0.450 (0.877) C:75% T:74%	pCi/L		09/20/21 11:13	
Total Radium Calculation	Total Radium	0.971 ± 0.622 (1.08)	pCi/L		09/24/21 14:38	
92558238001	**YGWA-2I**					
EPA 9315	Radium-226	0.284 ± 0.258 (0.500) C:96% T:NA	pCi/L		09/22/21 12:05	
EPA 9320	Radium-228	0.125 ± 0.379 (0.851) C:76% T:80%	pCi/L		09/20/21 11:11	
Total Radium Calculation	Total Radium	0.409 ± 0.637 (1.35)	pCi/L		09/24/21 14:37	
92558238002	**YGWA-3I**					
EPA 9315	Radium-226	1.01 ± 0.368 (0.461) C:97% T:NA	pCi/L		09/22/21 12:05	
EPA 9320	Radium-228	0.328 ± 0.385 (0.811) C:81% T:81%	pCi/L		09/20/21 11:12	
Total Radium Calculation	Total Radium	1.34 ± 0.753 (1.27)	pCi/L		09/24/21 14:37	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: UP-DUP-1 **Lab ID: 92557070001** Collected: 08/20/21 00:00 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.325 ± 0.195 (0.307) C:88% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.333 ± 0.342 (0.704) C:73% T:85%**	pCi/L	09/17/21 14:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.658 ± 0.537 (1.01)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: GWA-2 **Lab ID: 92557070002** Collected: 08/20/21 12:00 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0454 ± 0.104 (0.246) C:86% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.483 ± 0.364 (0.713) C:74% T:88%**	pCi/L	09/17/21 14:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.528 ± 0.468 (0.959)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-14S **Lab ID: 92557070003** Collected: 08/19/21 11:00 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00466 ± 0.157 (0.433) C:93% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.781 ± 0.436 (0.776) C:74% T:80%**	pCi/L	09/17/21 14:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.786 ± 0.593 (1.21)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: UP-DUP-2 **Lab ID: 92557070004** Collected: 08/19/21 00:00 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.111 ± 0.167 (0.360) C:99% T:NA**	pCi/L	09/20/21 15:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.08 ± 0.491 (0.804) C:74% T:78%**	pCi/L	09/17/21 14:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.19 ± 0.658 (1.16)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-1D **Lab ID: 92557070005** Collected: 08/19/21 11:10 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.276 ± 0.229 (0.401) C:93% T:NA**	pCi/L	09/20/21 15:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.894 ± 0.489 (0.876) C:74% T:84%**	pCi/L	09/17/21 14:25	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.718 (1.28)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-1I **Lab ID: 92557070006** Collected: 08/19/21 12:49 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0732 ± 0.237 (0.573) C:99% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.218 ± 0.601 (1.45) C:73% T:84%**	pCi/L	09/17/21 17:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0732 ± 0.838 (2.02)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-3D **Lab ID: 92557070007** Collected: 08/19/21 14:45 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.67 ± 0.511 (0.447) C:93% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.86 ± 0.774 (1.22) C:70% T:83%**	pCi/L	09/17/21 17:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.53 ± 1.29 (1.67)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-47 **Lab ID: 92557070008** Collected: 08/19/21 10:26 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.309 ± 0.197 (0.329) C:88% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.757 ± 0.724 (1.50) C:68% T:81%**	pCi/L	09/17/21 17:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.07 ± 0.921 (1.83)**	pCi/L	09/21/21 16:29	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-30I **Lab ID: 92557070009** Collected: 08/19/21 12:20 Received: 08/20/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.234 ± 0.232 (0.450) C:95% T:NA**	pCi/L	09/21/21 08:07	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0548 ± 0.544 (1.29) C:67% T:77%**	pCi/L	09/17/21 17:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.234 ± 0.776 (1.74)**	pCi/L	09/21/21 16:29	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-39 **Lab ID: 92557719005** Collected: 08/26/21 12:30 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.674 ± 0.261 (0.318) C:90% T:NA**	pCi/L	09/21/21 09:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0610 ± 0.461 (1.09) C:74% T:82%**	pCi/L	09/17/21 17:18	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.674 ± 0.722 (1.41)**	pCi/L	09/22/21 16:02	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: UP-FB-2 **Lab ID: 92558240001** Collected: 08/26/21 17:10 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0312 ± 0.148 (0.376) C:98% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.327 ± 0.417 (0.886) C:79% T:79%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.358 ± 0.565 (1.26)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-4I **Lab ID: 92558240002** Collected: 08/26/21 11:29 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.752 ± 0.313 (0.359) C:94% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.419 ± 0.429 (0.888) C:82% T:80%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.17 ± 0.742 (1.25)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-5I **Lab ID: 92558240003** Collected: 08/26/21 16:28 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.173 ± 0.181 (0.351) C:91% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.625 ± 0.402 (0.752) C:81% T:80%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.798 ± 0.583 (1.10)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: UP-DUP-3 **Lab ID: 92558240004** Collected: 08/26/21 00:00 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.101 ± 0.197 (0.455) C:96% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.620 ± 0.425 (0.816) C:81% T:80%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.721 ± 0.622 (1.27)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-5D **Lab ID: 92558240005** Collected: 08/26/21 13:35 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**3.80 ± 0.816 (0.373) C:102% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.883 ± 0.429 (0.726) C:80% T:82%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**4.68 ± 1.25 (1.10)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-17S **Lab ID: 92558240006** Collected: 08/27/21 10:45 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.438 ± 0.263 (0.394) C:86% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.462 ± 0.373 (0.739) C:81% T:81%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.900 ± 0.636 (1.13)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-18S **Lab ID: 92558240007** Collected: 08/26/21 15:35 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.145 ± 0.161 (0.309) C:95% T:NA**	pCi/L	09/22/21 08:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.541 ± 0.396 (0.768) C:77% T:84%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.686 ± 0.557 (1.08)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-18I **Lab ID: 92558240008** Collected: 08/27/21 09:35 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.104 ± 0.171 (0.381) C:97% T:NA**	pCi/L	09/22/21 08:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.657 ± 0.507 (1.01) C:73% T:84%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.761 ± 0.678 (1.39)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-20S **Lab ID: 92558240009** Collected: 08/27/21 13:10 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.632 ± 0.313 (0.451) C:95% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.147 ± 0.402 (0.898) C:74% T:84%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.779 ± 0.715 (1.35)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-21I **Lab ID: 92558240014** Collected: 09/01/21 14:40 Received: 09/02/21 17:02 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.934 ± 0.290 (0.223) C:90% T:NA**	pCi/L	09/22/21 09:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.924 ± 0.466 (0.823) C:76% T:81%**	pCi/L	09/20/21 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.86 ± 0.756 (1.05)**	pCi/L	09/27/21 15:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-40 **Lab ID: 92559523001** Collected: 09/03/21 10:20 Received: 09/03/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.350 ± 0.172 (0.206) C:91% T:NA**	pCi/L	09/22/21 09:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.621 ± 0.450 (0.877) C:75% T:74%**	pCi/L	09/20/21 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.971 ± 0.622 (1.08)**	pCi/L	09/24/21 14:38	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-2I **Lab ID: 92558238001** Collected: 08/27/21 11:33 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.284 ± 0.258 (0.500) C:96% T:NA**	pCi/L	09/22/21 12:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.125 ± 0.379 (0.851) C:76% T:80%**	pCi/L	09/20/21 11:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.409 ± 0.637 (1.35)**	pCi/L	09/24/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Sample: YGWA-3I **Lab ID: 92558238002** Collected: 08/27/21 09:55 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.01 ± 0.368 (0.461) C:97% T:NA**	pCi/L	09/22/21 12:05	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.328 ± 0.385 (0.811) C:81% T:81%**	pCi/L	09/20/21 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.34 ± 0.753 (1.27)**	pCi/L	09/24/21 14:37	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463915 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

METHOD BLANK: 2239836 Matrix: Water
Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0847 ± 0.121 (0.363) C:95% T:NA	pCi/L	09/22/21 09:35	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463401 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

METHOD BLANK: 2237310 Matrix: Water
Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0856 ± 0.0647 (0.268) C:96% T:NA	pCi/L	09/20/21 15:28	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463405 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009

METHOD BLANK: 2237315 Matrix: Water
Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0923 ± 0.177 (0.406) C:93% T:NA	pCi/L	09/22/21 08:46	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463403 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009

METHOD BLANK: 2237313 Matrix: Water
Associated Lab Samples: 92558240001, 92558240002, 92558240003, 92558240004, 92558240005, 92558240006, 92558240007, 92558240008, 92558240009

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.433 ± 0.419 (0.858) C:81% T:72%	pCi/L	09/20/21 14:35	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463914 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

METHOD BLANK: 2239835 Matrix: Water
Associated Lab Samples: 92558238001, 92558238002, 92558240014, 92559523001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.493 ± 0.373 (0.728) C:78% T:74%	pCi/L	09/20/21 11:12	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

QC Batch: 463398 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

METHOD BLANK: 2237303 Matrix: Water
Associated Lab Samples: 92557070001, 92557070002, 92557070003, 92557070004, 92557070005, 92557070006, 92557070007, 92557070008, 92557070009, 92557719005

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.384 ± 0.355 (0.721) C:77% T:80%	pCi/L	09/17/21 14:10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92557070001	**UP-DUP-1**	EPA 9315	463401		
92557070002	**GWA-2**	EPA 9315	463401		
92557070003	**YGWA-14S**	EPA 9315	463401		
92557070004	**UP-DUP-2**	EPA 9315	463401		
92557070005	**YGWA-1D**	EPA 9315	463401		
92557070006	**YGWA-1I**	EPA 9315	463401		
92557070007	**YGWA-3D**	EPA 9315	463401		
92557070008	**YGWA-47**	EPA 9315	463401		
92557070009	**YGWA-30I**	EPA 9315	463401		
92557719005	**YGWA-39**	EPA 9315	463401		
92558238001	**YGWA-2I**	EPA 9315	463915		
92558238002	**YGWA-3I**	EPA 9315	463915		
92558240001	**UP-FB-2**	EPA 9315	463405		
92558240002	**YGWA-4I**	EPA 9315	463405		
92558240003	**YGWA-5I**	EPA 9315	463405		
92558240004	**UP-DUP-3**	EPA 9315	463405		
92558240005	**YGWA-5D**	EPA 9315	463405		
92558240006	**YGWA-17S**	EPA 9315	463405		
92558240007	**YGWA-18S**	EPA 9315	463405		
92558240008	**YGWA-18I**	EPA 9315	463405		
92558240009	**YGWA-20S**	EPA 9315	463405		
92558240014	**YGWA-21I**	EPA 9315	463915		
92559523001	**YGWA-40**	EPA 9315	463915		
92557070001	**UP-DUP-1**	EPA 9320	463398		
92557070002	**GWA-2**	EPA 9320	463398		
92557070003	**YGWA-14S**	EPA 9320	463398		
92557070004	**UP-DUP-2**	EPA 9320	463398		
92557070005	**YGWA-1D**	EPA 9320	463398		
92557070006	**YGWA-1I**	EPA 9320	463398		
92557070007	**YGWA-3D**	EPA 9320	463398		
92557070008	**YGWA-47**	EPA 9320	463398		
92557070009	**YGWA-30I**	EPA 9320	463398		
92557719005	**YGWA-39**	EPA 9320	463398		
92558238001	**YGWA-2I**	EPA 9320	463914		
92558238002	**YGWA-3I**	EPA 9320	463914		
92558240001	**UP-FB-2**	EPA 9320	463403		
92558240002	**YGWA-4I**	EPA 9320	463403		
92558240003	**YGWA-5I**	EPA 9320	463403		
92558240004	**UP-DUP-3**	EPA 9320	463403		
92558240005	**YGWA-5D**	EPA 9320	463403		
92558240006	**YGWA-17S**	EPA 9320	463403		
92558240007	**YGWA-18S**	EPA 9320	463403		
92558240008	**YGWA-18I**	EPA 9320	463403		
92558240009	**YGWA-20S**	EPA 9320	463403		
92558240014	**YGWA-21I**	EPA 9320	463914		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES UPGRADIENT RADS
Pace Project No.: 92557070

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92559523001	**YGWA-40**	EPA 9320	463914		
92557070001	**UP-DUP-1**	Total Radium Calculation	464972		
92557070002	**GWA-2**	Total Radium Calculation	464972		
92557070003	**YGWA-14S**	Total Radium Calculation	464972		
92557070004	**UP-DUP-2**	Total Radium Calculation	464972		
92557070005	**YGWA-1D**	Total Radium Calculation	464972		
92557070006	**YGWA-1I**	Total Radium Calculation	464973		
92557070007	**YGWA-3D**	Total Radium Calculation	464973		
92557070008	**YGWA-47**	Total Radium Calculation	464973		
92557070009	**YGWA-30I**	Total Radium Calculation	464973		
92557719005	**YGWA-39**	Total Radium Calculation	465155		
92558238001	**YGWA-2I**	Total Radium Calculation	465555		
92558238002	**YGWA-3I**	Total Radium Calculation	465555		
92558240001	**UP-FB-2**	Total Radium Calculation	465554		
92558240002	**YGWA-4I**	Total Radium Calculation	465554		
92558240003	**YGWA-5I**	Total Radium Calculation	465554		
92558240004	**UP-DUP-3**	Total Radium Calculation	465554		
92558240005	**YGWA-5D**	Total Radium Calculation	465554		
92558240006	**YGWA-17S**	Total Radium Calculation	465554		
92558240007	**YGWA-18S**	Total Radium Calculation	465554		
92558240008	**YGWA-18I**	Total Radium Calculation	465554		
92558240009	**YGWA-20S**	Total Radium Calculation	465554		
92558240014	**YGWA-21I**	Total Radium Calculation	465783		
92559523001	**YGWA-40**	Total Radium Calculation	465559		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GK Power

Project #:

WO# : 92557089

92557089

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/23/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 0083

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.0

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

	Yes	No	N/A	Comments/Discrepancy:
Chain of Custody Present?	☑	☐	☐	1.
Samples Arrived within Hold Time?	☑	☐	☐	2.
Short Hold Time Analysis (<72 hr)?	☐	☑	☐	3.
Rush Turn Around Time Requested?	☐	☑	☐	4.
Sufficient Volume?	☑	☐	☐	5.
Correct Containers Used?	☑	☐	☐	6.
-Pace Containers Used?	☑	☐	☐	
Containers Intact?	☑	☐	☐	7.
Dissolved analysis: Samples Field Filtered?	☐	☐	☑	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: W	☐	☑	☐	9. EB-1 + FB-1 collection time listed on COC but containers are on WO. work order
Headspace in VOA Vials (>5-6mm)?	☐	☐	☑	10.
Trip Blank Present?	☐	☐	☑	11.
Trip Blank Custody Seals Present?	☐	☐	☑	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A: Required Client Information		Section B: Required Project Information		Section C: Invoice Information	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
Email To:	SCS and Arcadis Contacts	Purchase Order #:		Address:	
Phone:		Project Name:		Pace Quote:	
Requested Due Date:	10 Day	Project Number:		Pace Profile #:	

Regulatory Agency
CCR
State / Location
GA

SAMPLE ID

ITEM #	SAMPLE ID	SAMPLE CONDITIONS
1	[illegible]	5.86
2	[illegible]	5.56
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

Preservatives

Analyses Test Y/N

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]			[signature]				Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [handwritten name]

SIGNATURE of SAMPLER: [signature]

DATE Signed: [illegible]

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 4

Section A Required Client Information	Section B Required Project Information	Section C Invoice Information
[illegible]	Report To: [illegible]	[illegible]
	Project Name: [illegible]	

ITEM #	SAMPLE ID	MATRIX CODE	DATE	TIME	DATE	TIME	# OF CONTAINERS	Analyses Test	Residual Chlorine (Y/N)
1	[illegible]	WT	[illegible]	[illegible]			4		
2	[illegible]	WT							
3	[illegible]	WT	[illegible]	[illegible]			5		
4	[illegible]	WT							
5	[illegible]	WT							
6	[illegible]	WT							
7	[illegible]	WT							
8	[illegible]	WT							
9	[illegible]	WT							
10	[illegible]	WT	[illegible]				4		pH 7.32
11	[illegible]	WT	[illegible]				4		
12	[illegible]	WT							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	[illegible]	1730	[illegible]	[illegible]	1751	T.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible]

SIGNATURE of SAMPLER: [signature] DATE Signed: [illegible]

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions [illegible]

Page: 2 of 4

Section A — Required Client Information: Company: [illegible]; Address: [illegible], Atlanta, GA [illegible]; Requested Due Date: [illegible]

Section B — Required Project Information: Report To: [illegible]; Copy To: [illegible]; Purchase Order #: ; Project Name: [illegible]; Project #:

Section C — Invoice Information: Attention: ; Company Name: ; Address: ; Pace Quote: ; Pace Project Manager: [illegible]; Pace Profile #: [illegible]

Regulatory Agency: ; State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	# OF CONTAINERS	Preservatives	TDS	Cl, F, SO4	App III/IV Metals	RAD	Residual Chlorine / Sample Conditions
1	[illegible]	WT			1110				✓	X	X	X	X	—
2	[illegible]	WT								X	X	X	X	
3	[illegible]	WT		8/17	1512			5	✓	X	X	X	X	—
4	[illegible]	WT								X	X	X	X	
5	[illegible]	WT								X	X	X	X	
6	[illegible]	WT								X	X	X	X	
7	[illegible]	WT								X	X	X	X	
8	[illegible]	WT								X	X	X	X	
9	[illegible]	WT								X	X	X	X	
10	[illegible]	WT		[illegible]	[illegible]			4	✓	X	X	X	X	pH 7.32
11	[illegible]	WT		[illegible]	—			4	✓	X	X	X	X	—
12	JS YGWA-30I	WT		8/19	1020			4 ✓	✓	X	X	X	X	pH 5.43

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[illegible]	[illegible]	[illegible]	[illegible]	8/[illegible]	1742	5.0	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible]

SIGNATURE of SAMPLER: [illegible]

DATE Signed: [illegible]

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 4

Section A	Section B	Section C
Required Client Information:	Required Project Information:	Invoice Information:
Company: Georgia Power	Report To: SCS Contacts	Attention: Southnet Co
Address: Atlanta, GA	Copy To: Arcadis Contacts	Company Name:
	Purchase Order #	Address:
Email To: SCS and Arcadis Contacts	Project Name: [redacted]	Pace Quote:
Phone: Fax	Project Number: [redacted]	Pace Project Manager: Kevin Henning Nicole Dolce
Requested Due Date: 10 Day		Pace Profile #: 1028

Regulatory Agency
GDR
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9, / , -) Sample IDs MUST be unique)	SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	Preservatives	Analyses Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	
1	[redacted]												
2	[redacted]												
3	[redacted]												
4	[redacted]												
5	[redacted] YGWA-1D			5/1	1410								6.32
6	[redacted] YGWA-1S			5/1	1345								6.38
7	[redacted] YGWA-3D			5/1	1446								5.34
8	[redacted]												
9	[redacted]												
10	[redacted]			[redacted]									
11	[redacted]												
12	[redacted]			[redacted]									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[redacted]	5/2	1730	[redacted]	[redacted]	[redacted]	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Cook

SIGNATURE of SAMPLER: [redacted] DATE Signed: 5/2/12

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 4 of 4

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company:	Georgia Power	Report To:	SCS Contacts	Attention:	Southern Co.
Address:	Atlanta, GA	Copy To:	Arcadis Contacts	Company Name:	
				Address:	
Email To:	SCS Contacts	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	[redacted] Gypsum	Pace Project Manager:	Kevin Herring/Betsy McDaniel
Requested Due Date:	10 Day	Project Number:		Pace Profile #:	[illegible]

Regulatory Agency
CCR
State / Location
GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test	TDS 2450C	Anions (Cl, F, SO4)	App III Metals (B & Ca)	App IV Metals	Mercury 7470A	Radium 226/228	Residual Chlorine (Y/N)	
1	[illegible]	[illegible]	G	[illegible]	[illegible]					X		X							x	x	x	x	x	x		5.50
2																										
3																										
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
[illegible]	[signature]	[illegible]	[illegible]	[signature]	[illegible]	[illegible]	[illegible]	Y	N	Y
[illegible]										
[illegible]										

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	
SIGNATURE of SAMPLER:	DATE Signed:

TEMP in C / Received on Ice (Y/N) / Custody Sealed Cooler (Y/N) / Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92557720

PM: NMG Due Date: 09/09/21

CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CAH

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: Q83 ☐ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : Of

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS and Arcadis Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	SCS Contacts
Copy To:	Arcadis Contacts
Purchase Order #:	
Project Name:	Yates AMA-R6 (downgradient)
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency	
EPD	
State / Location	
GA	

ITEM #	SAMPLE ID	MATRIX CODE	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	TDS 2540C	Anions Suite 300.0	App III Metals	App IV Metals (tbs 1)	Radium 226/228, 9315/9320	Alkalinity (2320B)	Cations (Na, K, Mg, Ca)	Mercury (7470A)	Residual Chlorine (Y/N)
1	[illegible]	WT	G															x	x	x	x	x			x	
2	YGWA-[illegible]	WT	G	8/26/21	1235				2			3						x	x	x	x	x			x	
3	[illegible]	WT	G															x	x	x	x	x			x	
4		WT	G																							
5		WT	G																							
6		WT	G																							
7		WT	G																							
8		WT	G																							
9		WT	G																							
10		WT	G																							
11		WT	G																							
12																										

pH / 6.91

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, Sulfate)	[signature]	8/26/21	1410	[signature]	8/26	1410	
App III Metals: Boron 6020, Ca 6010D		8/27	1640	[signature]	8/27/21	1640	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Katie Rokowski

SIGNATURE of SAMPLER: [signature] DATE Signed: 8-26-21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558251

92558251

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 3/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 Of

Section A
Required Client Information:

Company: Georgia Power
Address: Atlanta, GA
Email To: SCS and Arcadis Contacts
Phone: Fax:
Requested Due Date: 10 Day

Section B
Required Project Information:

Report To: SCS Contacts
Copy To: Arcadis Contacts
Purchase Order #:
Project Name: Yates AP-2 (upgradient)
Project Number:

Section C
Invoice Information:

Attention: Southern Co.
Company Name:
Address:
Pace Quote:
Pace Project Manager: Kevin Herring/Nicole D'Olier
Pace Profile #: 10640

Regulatory Agency: GDR
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	Matrix Codes	Sample Type	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	Sample Temp at Collection	# of Containers	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Analyses Test: 1030 (ASG)	Arsenic Suite 3010	App IV Metals	App IV Metals (As, Li)	Radium 226/228, 9315/9320	Residual Chlorine (Y/N)	
	YGWA-2	WATER	Grab	5/2/17	1533				7	X		X							X	X	X	X	X		pH 7.14
	YGWA-3	WATER	Grab	5/2/17	1557				7	X		X							X	X	X	X	X		pH 7.39

	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Arsenic Suite 3010 (Cl, F, Sulfate)	5/2/17	1740		5/3/17	0900	
App III Metals, Boron (B208), Ca (6010)	5/3/17	1540		5/3/17	1540	
App IV Metals (6020): Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)						

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark Cinea
SIGNATURE of SAMPLER: [signature] DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558254

92558254

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0 Type of Ice:

Cooler Temp Corrected (°C): 3.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☑ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☐ Yes	☑ No	☐ N/A	9. AMA-EB-1 labeled 4P-EB-1 but time matches 8/26/21 1600
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 Of 1

Section A — Required Client Information:
Company: Accelis (GA Power)
Address: 3000 Pace's Ferry Rd
Suite 900, Atlanta, GA 30339
Email:
Phone: Fax:
Requested Due Date:

Section B — Required Project Information:
Report To: Sonny Stalvey
Copy To:
Purchase Order #:
Project Name: Yates Ash
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10842

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique)	MATRIX CODE (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 TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: TDS	O.T. 504	Apr 300V Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	ABA-ES-1	WT																X	X	X	X			
2	ABA-ES-2	WT																X	X	X	X			
3	ABA-FS-1	WT																X	X	X	X			
4	ABA-FS-2	WT																X	X	X	X			
5	UP-ES-1	WT																X	X	X	X			
6	UP-FS-1	WT	8/24	7:10					5	X		X						X	X	X	X		5.62	
7	[illegible]	WT																X	X	X	X			
8	UP-FS-2	WT																X	X	X	X			
9	YDMW-01	WT	8/24	8:45					5	X		X						X	X	X	X		551 SU	
10	YDMW-02	WT	8/24	11:28					5	X		X						X	X	X	X		-	
11	UP-DUP-1	WT	8/24	-					5	X		X						X	X	X	X		7.16 SU	
12	YDMW-03	WT	8/24	13:35					5	X		X						X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature]	8/24	1440	[signature]	8/24	1440	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Mark Chet
SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

TEMP in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: Becky Steever	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates Ash	Pace Project Manager: [illegible]@pacelabs.com
Requested Due Date:	Project #:	Pace Profile #: [illegible]

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	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	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1045				5	✓	✓							X	X	X	X			Ph: 5.27
14	~~[illegible]~~ YGWA-18S	WT		8/26	1535				5	✓	✓							X	X	X	X			Ph: 4.40
15	YGWA-18I	WT		8/27	0955				5	✓	✓							X	X	X	X			Ph: 5.40
16	YGWA-20S	WT		8/27	1310				5	✓	✓							X	X	X	X			Ph: 5.57
17	YGWA-21I	WT																X	X	X	X			
18	YGWC-23S	WT																X	X	X	X	X		
19	YGWC-24SA	WT																X	X	X	X			
20	AMA-DUP 1	WT																X	X	X	X			
21	YGWC-36A	WT																X	X	X	X	X		
22	YGWC-49	WT																X	X	X	X			
23	AMA-EB-1			8/26	1600				5									X	X	X	X			
24	AMA-EB-2			8/27	1340				5									X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Arcadis	8/27		[signature]	8/27	18:40	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: **WO#: 92558254**

PM: NMG Due Date: 09/13/21

CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/2/21 KRM

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:	W			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : of

Section A — Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B — Required Project Information:

Report To:	[redacted]
Copy To:	[redacted]
Purchase Order #:	
Project Name:	[redacted]
Project Number:	

Section C — Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Regulatory Agency	EPD
State / Location	GA

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

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	Analyses Test Y/N	TDS 2540C	Anions Suite 300.0	App III Metals	App. IV Metals (No Tl)	Radium 226/228 9315/9320	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)	
1	[redacted]	WT	G																x	x	x	x	x				
2	[redacted]	WT	G																x	x	x	x	x				
3	[redacted]	WT	G																x	x	x	x	x				
4	[redacted]	WT	G																x	x	x	x	x				
5	[redacted]	WT	G																x	x	x	x	x	x			
6	[redacted]	WT	G																x	x	x	x	x				
7	[redacted]	WT	G																x	x	x	x	x				
8	[redacted]	WT	G																x	x	x	x	x				
9	[redacted]	WT	G																x	x	x	x	x				
10	[redacted] ARA-DUP-1	WT	G	9/1	—				5	✓		✓							x	x	x	x	x	RAS			
11	[redacted] YGWC-23A	WT	G	9/1	1025				5	✓		✓							x	x	x	x	x	RAS			pH 5.22
12	[redacted] YGWA-21I	WT	G	9/1	1440				5	✓		✓							x	x	x	x	x				pH 6.65

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, sulfate)	[signature] / Arcadis	9/2/21	1530	[signature] / Arcadis	9/2/21	1530	
App III Metals: Boron 6020B Ca 6010D	[signature]	9/2/21	1702	[signature] / PACE	9/2/21	1702	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joe Swanson

SIGNATURE of SAMPLER: [signature]

DATE Signed: 9/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: ARCADIS - GAlower

Project

WO# : 92559527

92559527

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/3/19 CR

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C

Cooler Temp Corrected (°C): 5.0

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ 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:	WT			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: [illegible]	Attention:
Address: 2839 Pacto Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA [illegible]		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates RG	Pace Project Manager: [illegible]
Requested Due Date:	Project #:	Pace Profile #: [illegible]

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	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	TDS	Cl, F, SO4	App III/IV Metals	III/IV + Cations	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)
1	[illegible]	WT																x	x		x	x	x	
2	[illegible]	WT		[illegible]	[illegible]													x	x		x	x	x	435
3	[illegible]	WT																x	x		x	x	x	
4	[illegible]	WT																x	x		x	x	x	
5	[illegible]	WT																x	x			x		
6	[illegible]	WT																x	x		x	x	x	
7	[illegible]	WT																x	x		x	x	x	
8	[illegible]	WT																		x				
9	[illegible]	WT																		x				
10	[illegible]	WT																		x				
11	[illegible]	WT																		x				
12	[illegible]	WT																		x				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / ARS	9/3/21	1730	[signature] / Pace	9/3/21	1775	4.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: [illegible] Chest

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/3/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 02, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES AMA RADS
Pace Project No.: 92558240

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory between August 27, 2021 and September 03, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES AMA RADS
Pace Project No.: 92558240

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES AMA RADS
Pace Project No.: 92558240

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92558240010	**AMA-EB-1**	Water	08/26/21 16:00	08/27/21 16:40
92558240011	**AMA-EB-2**	Water	08/27/21 13:40	08/27/21 16:40
92558240012	**AMA-DUP-1**	Water	09/01/21 00:00	09/02/21 17:02
92558240013	**YGWC-24SA**	Water	09/01/21 10:25	09/02/21 17:02
92558240015	**YGWC-36A**	Water	09/03/21 14:00	09/03/21 17:30
92558240016	**PZ-37D**	Water	09/03/21 12:20	09/03/21 17:30

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES AMA RADS
Pace Project No.: 92558240

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92558240010	**AMA-EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240011	**AMA-EB-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240012	**AMA-DUP-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240013	**YGWC-24SA**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240015	**YGWC-36A**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA
92558240016	**PZ-37D**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	RMK	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92558240

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558240010	**AMA-EB-1**					
EPA 9315	Radium-226	0.00866 ± 0.143 (0.385) C:97% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	0.968 ± 0.573 (1.08) C:76% T:74%	pCi/L		09/20/21 14:36	
Total Radium Calculation	Total Radium	0.977 ± 0.716 (1.47)	pCi/L		09/24/21 14:36	
92558240011	**AMA-EB-2**					
EPA 9315	Radium-226	0.0934 ± 0.177 (0.405) C:101% T:NA	pCi/L		09/22/21 08:11	
EPA 9320	Radium-228	0.353 ± 0.416 (0.876) C:71% T:79%	pCi/L		09/20/21 14:37	
Total Radium Calculation	Total Radium	0.446 ± 0.593 (1.28)	pCi/L		09/24/21 14:36	
92558240012	**AMA-DUP-1**					
EPA 9315	Radium-226	0.173 ± 0.135 (0.230) C:93% T:NA	pCi/L		09/22/21 09:39	
EPA 9320	Radium-228	0.961 ± 0.437 (0.728) C:74% T:87%	pCi/L		09/20/21 11:13	
Total Radium Calculation	Total Radium	1.13 ± 0.572 (0.958)	pCi/L		09/27/21 15:44	
92558240013	**YGWC-24SA**					
EPA 9315	Radium-226	0.119 ± 0.117 (0.216) C:88% T:NA	pCi/L		09/22/21 09:39	
EPA 9320	Radium-228	0.325 ± 0.383 (0.806) C:76% T:79%	pCi/L		09/20/21 11:13	
Total Radium Calculation	Total Radium	0.444 ± 0.500 (1.02)	pCi/L		09/27/21 15:44	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES AMA RADS
Pace Project No.: 92558240

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92558240015	**YGWC-36A**					
EPA 9315	Radium-226	-0.0254 ± 0.103 (0.292) C:94% T:NA	pCi/L		09/22/21 09:35	
EPA 9320	Radium-228	0.622 ± 0.397 (0.749) C:77% T:82%	pCi/L		09/20/21 11:12	
Total Radium Calculation	Total Radium	0.622 ± 0.500 (1.04)	pCi/L		09/24/21 14:36	
92558240016	**PZ-37D**					
EPA 9315	Radium-226	2.16 ± 0.488 (0.264) C:90% T:NA	pCi/L		09/22/21 09:36	
EPA 9320	Radium-228	1.02 ± 0.413 (0.637) C:79% T:88%	pCi/L		09/20/21 11:12	
Total Radium Calculation	Total Radium	3.18 ± 0.901 (0.901)	pCi/L		09/24/21 14:37	

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Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

Sample: AMA-EB-1 **Lab ID: 92558240010** Collected: 08/26/21 16:00 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00866 ± 0.143 (0.385) C:97% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.968 ± 0.573 (1.08) C:76% T:74%**	pCi/L	09/20/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.977 ± 0.716 (1.47)**	pCi/L	09/24/21 14:36	7440-14-4	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

Sample: AMA-EB-2 **Lab ID: 92558240011** Collected: 08/27/21 13:40 Received: 08/27/21 16:40 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0934 ± 0.177 (0.405) C:101% T:NA**	pCi/L	09/22/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.353 ± 0.416 (0.876) C:71% T:79%**	pCi/L	09/20/21 14:37	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.446 ± 0.593 (1.28)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

Sample: AMA-DUP-1 **Lab ID: 92558240012** Collected: 09/01/21 00:00 Received: 09/02/21 17:02 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.173 ± 0.135 (0.230) C:93% T:NA**	pCi/L	09/22/21 09:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.961 ± 0.437 (0.728) C:74% T:87%**	pCi/L	09/20/21 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.13 ± 0.572 (0.958)**	pCi/L	09/27/21 15:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

Sample: YGWC-24SA **Lab ID: 92558240013** Collected: 09/01/21 10:25 Received: 09/02/21 17:02 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.119 ± 0.117 (0.216) C:88% T:NA**	pCi/L	09/22/21 09:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.325 ± 0.383 (0.806) C:76% T:79%**	pCi/L	09/20/21 11:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.444 ± 0.500 (1.02)**	pCi/L	09/27/21 15:44	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

Sample: YGWC-36A **Lab ID: 92558240015** Collected: 09/03/21 14:00 Received: 09/03/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0254 ± 0.103 (0.292) C:94% T:NA**	pCi/L	09/22/21 09:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.622 ± 0.397 (0.749) C:77% T:82%**	pCi/L	09/20/21 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.622 ± 0.500 (1.04)**	pCi/L	09/24/21 14:36	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

Sample: PZ-37D **Lab ID: 92558240016** Collected: 09/03/21 12:20 Received: 09/03/21 17:30 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**2.16 ± 0.488 (0.264) C:90% T:NA**	pCi/L	09/22/21 09:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.02 ± 0.413 (0.637) C:79% T:88%**	pCi/L	09/20/21 11:12	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.18 ± 0.901 (0.901)**	pCi/L	09/24/21 14:37	7440-14-4	

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

QC Batch: 463915
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558240012, 92558240013, 92558240015, 92558240016

METHOD BLANK: 2239836 Matrix: Water
Associated Lab Samples: 92558240012, 92558240013, 92558240015, 92558240016

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0847 ± 0.121 (0.363) C:95% T:NA	pCi/L	09/22/21 09:35	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

QC Batch: 463403
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558240010, 92558240011

METHOD BLANK: 2237313 Matrix: Water
Associated Lab Samples: 92558240010, 92558240011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.433 ± 0.419 (0.858) C:81% T:72%	pCi/L	09/20/21 14:35	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

QC Batch: 463405
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558240010, 92558240011

METHOD BLANK: 2237315
Matrix: Water
Associated Lab Samples: 92558240010, 92558240011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0923 ± 0.177 (0.406) C:93% T:NA	pCi/L	09/22/21 08:46	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES AMA RADS
Pace Project No.: 92558240

QC Batch: 463914
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92558240012, 92558240013, 92558240015, 92558240016

METHOD BLANK: 2239835 Matrix: Water
Associated Lab Samples: 92558240012, 92558240013, 92558240015, 92558240016

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.493 ± 0.373 (0.728) C:78% T:74%	pCi/L	09/20/21 11:12	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES AMA RADS
Pace Project No.: 92558240

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES AMA RADS
Pace Project No.: 92558240

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92558240010	**AMA-EB-1**	EPA 9315	463405		
92558240011	**AMA-EB-2**	EPA 9315	463405		
92558240012	**AMA-DUP-1**	EPA 9315	463915		
92558240013	**YGWC-24SA**	EPA 9315	463915		
92558240015	**YGWC-36A**	EPA 9315	463915		
92558240016	**PZ-37D**	EPA 9315	463915		
92558240010	**AMA-EB-1**	EPA 9320	463403		
92558240011	**AMA-EB-2**	EPA 9320	463403		
92558240012	**AMA-DUP-1**	EPA 9320	463914		
92558240013	**YGWC-24SA**	EPA 9320	463914		
92558240015	**YGWC-36A**	EPA 9320	463914		
92558240016	**PZ-37D**	EPA 9320	463914		
92558240010	**AMA-EB-1**	Total Radium Calculation	465554		
92558240011	**AMA-EB-2**	Total Radium Calculation	465554		
92558240012	**AMA-DUP-1**	Total Radium Calculation	465783		
92558240013	**YGWC-24SA**	Total Radium Calculation	465783		
92558240015	**YGWC-36A**	Total Radium Calculation	465554		
92558240016	**PZ-37D**	Total Radium Calculation	465555		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO# : 92558240

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 8/27/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 083 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 3.0 Correction Factor: Add/Subtract (°C) 0.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 3.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☐ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: W	☐ Yes	☑ No	☐ N/A	9. AMA-EB-1 labeled AP-EB-1 but time match 8/26/21 1600
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO# : 92558240**

PM: NMG Due Date: 09/20/21

CLIENT: GA-GA Power

Sample	BP4U-125 mL Plastic Unpreserved (N/A) (O-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic HNO3 (pH < 2) (O-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4S-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (O-)	WGKU-Wide mouthed glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (O-)	AG1H-1 liter Amber HCl (pH < 2)	AG4U-250 mL Amber Unpreserved (N/A) (O-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3AS(DG9AM)-250 mL Amber NaHSO4 (N/A)(DG9)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VSGU (9 vials per kit)-40mL Unp kit (N/A)	VJGU (3 vials per kit)-HCl-40mL kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - kit)	SP5T-250 mL Sterile Plastic (N/A - kit)	BP3H-250 mL Plastic (NaOH)+ZnOAc (>9 & <10)	AG5U-100 mL Amber Unpreserved vials (N/A)	VG9U-40 mL Unpreserved vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1																									
2		1																									
3		1																									
4		1																									
5		1																									
6		1																									
7		1																									
8		1																									
9		1																									
10		1																									
11		1																									
12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A – Required Client Information:
Company: Acadia (GA Power)
Address: 2480 Maner Ferry Rd
Suite 900, Atlanta, GA 30339
Email:
Phone: Fax:
Requested Due Date:

Section B – Required Project Information:
Report To: Becky Steever
Copy To:
Purchase Order #:
Project Name: Yates AMA
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]@pacelabs.com
Pace Profile #: 10642

Regulatory Agency:
State / Location: GA

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	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
1	AMA-EB-1	WT																x	x	x	x			
2	AMA-EB-2	WT																x	x	x	x			
3	AMA-FB-1	WT																x	x	x	x			
4	AMA-FB-2	WT																x	x	x	x			
5	UP-EB-1	WT																x	x	x	x			
6	UP-FB-1	WT	8/26/21	1710				5	X		X						x	x	x	x			
7	~~UP-EB-2~~	WT																x	x	x	x			
8	UP-FB-2	WT																x	x	x	x			
9	YGWA-4I	WT	8/26/21	1105				5	X		X						x	x	x	x			5.82
10	YGWA-5I	WT	8/26/21	1628				5	X		X						x	x	x	x			5.51 SU
11	UP-DUP-3	WT	8/26/21	–				5	X		X						x	x	x	x			–
12	YGWA-5D	WT	8/26/21	1335				5	X		X						x	x	x	x			7.16 SU

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Pace	8/27/21	1640	[signature]	8/27/21	1640	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Mark Chest
SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Page: 2 Of 2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Arcadis (GA Power)	Report To: [illegible]	Attention:
Address: 2839 Paces Ferry Rd	Copy To:	Company Name:
Suite 900, Atlanta, GA 30339		Address:
Email:	Purchase Order #:	Pace Quote:
Phone: Fax:	Project Name: Yates AMA	Pace Project Manager: [illegible]
Requested Due Date:	Project #:	Pace Profile #: [illegible]

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	TDS	Cl, F, SO4	App III/IV Metals	RAD 9315/9320	Alkalinity	Residual Chlorine (Y/N)	
13	YGWA-17S	WT		8/27	1043				5	✓		✓						x	x	x	x			Ph: 5.27
14	~~[illegible]~~ YGWA-18S	WT		8/26	1535				5	✓		✓						x	x	x	x			Ph: 4.40
15	YGWA-1I	WT		8/27	0935				5	✓		✓						x	x	x	x			Ph: 5.40
16	YGWA-20S	WT		8/27	1310				5	✓		✓						x	x	x	x			Ph: 5.57
17	YGWA-21I	WT																x	x	x	x			
18	YGWC-23S	WT																x	x	x	x	x		
19	YGWC-24SA	WT																x	x	x	x			
20	AMA-DUP-1	WT																x	x	x	x			
21	YGWC-36A	WT																x	x	x	x	x		
22	YGWC-49	WT																x	x	x	x			
23	AMA-EB-1			8/26	1600				5									X	X	X	X			
24	AMA-EB-2			8/27	1340				5									X	X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	[signature] / Arcadis	8/27		[signature]	8/27	1640	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jake Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 8/27/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: GA Power

Project #: WO#: 92558240

PM: NMG Due Date: 09/28/21
CLIENT: GA-GA Power

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/27/21 KRW

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☑ IR Gun ID: 230 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 3.9 Correction Factor: Add/Subtract (°C) +0.1

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 4.0

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☐ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☐ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: W				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority:

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Project #

WO# : 92558240

PM: NMG Due Date: 09/20/21

CLIENT: GA-GA Power

Item #	BP4U-125 mL Plastic Unpreserved (N/A) (CH)	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) (CH)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4B-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CH)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CH)	AG1H-1 liter Amber HCl (pH < 2)	AG4U-250 mL Amber Unpreserved (N/A) (CH)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG4U/DG9AB-250 mL Amber NaBiS (N/A) (CH)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NaTiO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAX (5 vials per kit)-Hydrochloric kit (N/A)	VTGX (3 vials per kit)-Hydrochloric kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - ST)	SP2T-500 mL Sterile Plastic (N/A - ST)	BP4U-250 mL Plastic Unpreserved (0.5-8 oz)	AG4U-250 mL Amber Unpreserved (N/A)	VG9U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1			1																					
2		1	1			1																					
3		1	1			1																					
4		1	1			1																					
5		1	1			1																					
6		1	1			1																					
7		1	1			1																					
8																											
9																											
10																											
11																											
12																											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company:	Georgia Power
Address:	Atlanta, GA
Email To:	SCS Contacts
Phone:	Fax:
Requested Due Date:	10 Day

Section B Required Project Information:

Report To:	[redacted] Bailey Sorrell
Copy To:	[redacted]
Purchase Order #:	
Project Name:	[redacted]
Project Number:	

Section C Invoice Information:

Attention:	Southern Co.
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	Kevin Herring/Nicole D'Oleo
Pace Profile #:	10840

Page : of

Regulatory Agency	
DOR	
State / Location	
GA	

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TDS 2450C	Anions Suite 300.0	App III Metals	App. IV Metals (No Tl)	Radium 226/228	Alkalinity	Cations (Na, K, Mg, Ca)	Residual Chlorine (Y/N)	SAMPLE CONDITIONS
1	[redacted]	WT	G																x	x	x	x	x				-
2	[redacted]	WT	G																x	x	x	x	x				-
3	[redacted]	WT	G																x	x	x	x	x				-
4	[redacted]	WT	G																x	x	x	x	x				-
5	[redacted]	WT	G																x	x	x	x	x				-
6	[redacted]	WT	G																x	x	x	x	x	x			pH
7	[redacted]	WT	G																x	x	x	x	x				pH
8	[redacted]	WT	G																x	x	x	x	x				pH
9	[redacted]	WT	G																x	x	x	x	x	x			pH
10	[redacted] AMA-DUP-1	WT	G	9/1	—				5	✓		✓							x	x	x	x	x	x			pH
11	[redacted] YGWC-45A	WT	G	9/1	1005				5	✓		✓✓							x	x	x	x	x	x			pH 5.22
12	[redacted] YGWA-21I	WT	G	9/1	1110				5	✓		✓							x	x	x	x	x				pH 6.65

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Anions Suite 300.0 (Cl, F, sulfate)	[signature] / Arcadis	9/2/21	1530	[signature] / Arcadis	9/2/21	1530	
App III Metals: Boron 6020B Ca 6010D	[signature]	9/3/21	1702	[signature] / PACE	9/3/21	1702	
App IV Metals 6020B: Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Cobalt (Co), Lead (Pb), Lithium (Li), Molybdenum (Mo), Selenium (Se)							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: J.C. Swanson

SIGNATURE of SAMPLER: [signature] DATE Signed: 9/2/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: ARCADIS – GA Power

Project #: **WO#: 92558240**

PM: NMG Due Date: 09/20/21

CLIENT: GA-GA Power

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other:

Custody Seal Present? ☐ Yes ☑ Not Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/13/21 CM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ Gun ID: 230 ☑ Wet ☐ Blue ☐ None

Type of Ice:

Cooler Temp: 4.9 Correction Factor: Add/Subtract (°C): +0.1

Cooler Temp Corrected (°C): 5.0

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: SW/GW/W				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO# : 92558240**

PM: NMG Due Date: 09/20/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CL)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4N-125 mL Plastic H2SO4 (pH < 2) (CL)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CL)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CL)	AG1H-1 liter Amber HCl (pH < 2)	AG1U-250 mL Amber Unpreserved (N/A) (CL)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG1AB(DG9AB)-250 mL Amber NH4Cl (N/A)(CL)	DG9H-40 mL VOA HCl (N/A)	VG9U-40 mL VOA NaO2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9M-40 mL VOA H2SO4 (N/A)	VOAM (3 vials per kit)-MeOH kit (N/A)	VSGK (3 vials per kit)-NH4HSO4 kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - 7dy)	SP5T-250 mL Sterile Plastic (N/A - 7dy)		BP4A-250 mL Plastic ZnOH2SO4 (9 >9<)	AG0U-150 mL Amber Unpreserved vials (N/A)	VG9U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		2	1			2																			2			
2		1				1																						
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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.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 2 Of 2

Section A – Required Client Information		Section B – Required Project Information		Section C – Invoice Information	
Company:	Arcadis (GA Power)	Report To:	Sandy [illegible]	Attention:	
Address:	2839 Paces Ferry Rd	Copy To:		Company Name:	
	Suite 900, Atlanta, GA 30339			Address:	
Email:		Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates AMA	Pace Project Manager:	[illegible]@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	10840

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Analyses Test: RAD 9315/9320	Requested Analysis	Residual Chlorine (Y/N)
13	YGWC-[illegible]	WT								x		
14	YGWC-[illegible]	WT								x		
15	AP-2-DUP-1	WT								x		
16	YGWC-[illegible]	WT								x		
17	YGWC-[illegible]	WT								x		
18	YGWC-[illegible]	WT								x		
19	YGWC-[illegible]	WT								x		
20	[illegible]	WT								x		
21	YGWC-36A			4/3	1400				6	X	X X X X X	Ph: 5.06
22	YAMW-3			4/3	1005				2		X X	Ph: 5.74
23	PZ-37D			4/3	1020				5	X	X X X X	Ph: 2.44
24												

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

Preservatives: Unpreserved, H2SO4, HNO3, HCl, NaOH, Na2S2O3, Methanol, Other

Cl, F, SO4; App III/IV metals; III/IV Cations; Rad 9315/9320; Alkalinity

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / Arcadis	4/3	1750	[signature]	4/3/21	1725	4.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

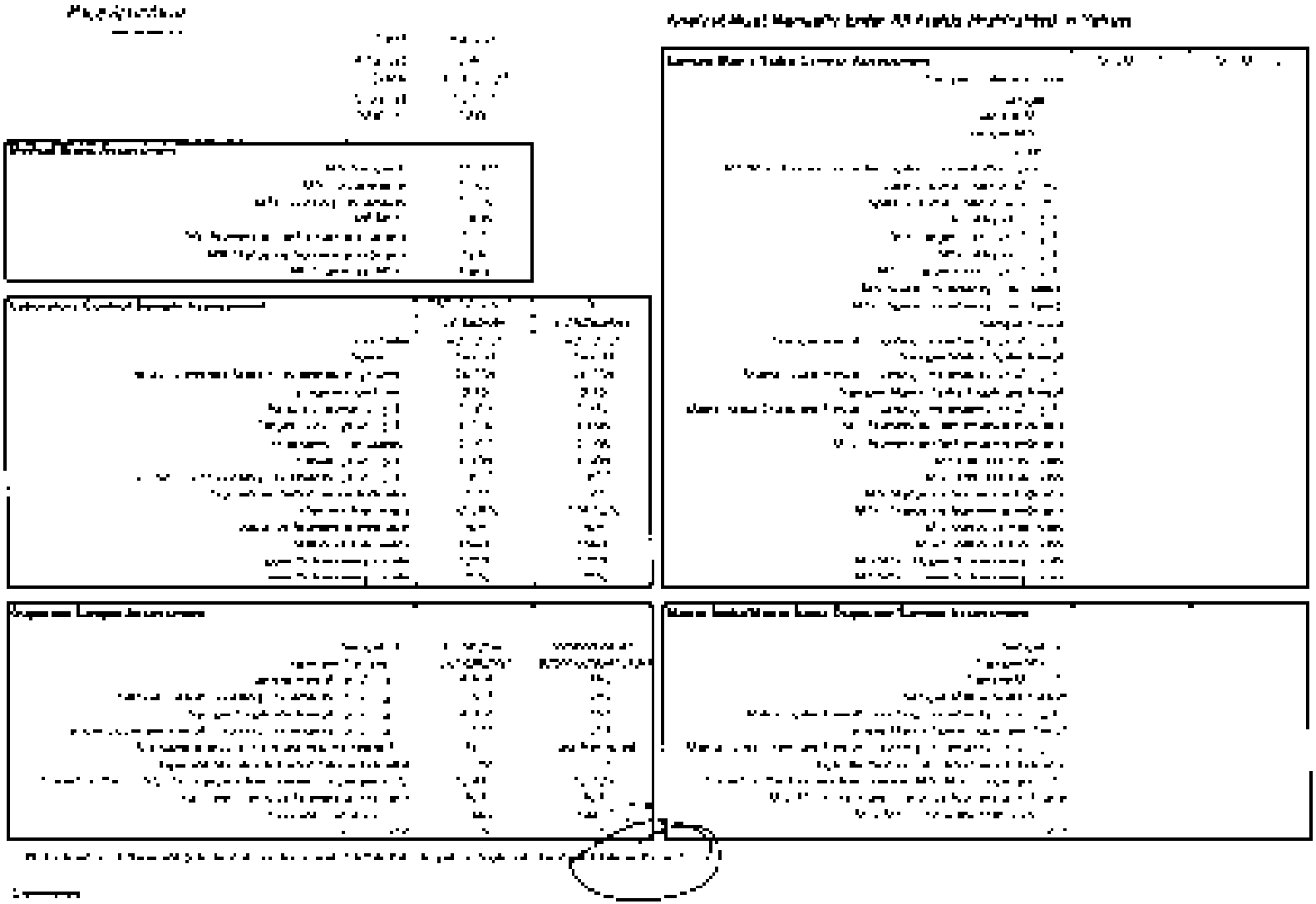
PRINT Name of SAMPLER: Joe Sussex

SIGNATURE of SAMPLER: [signature]

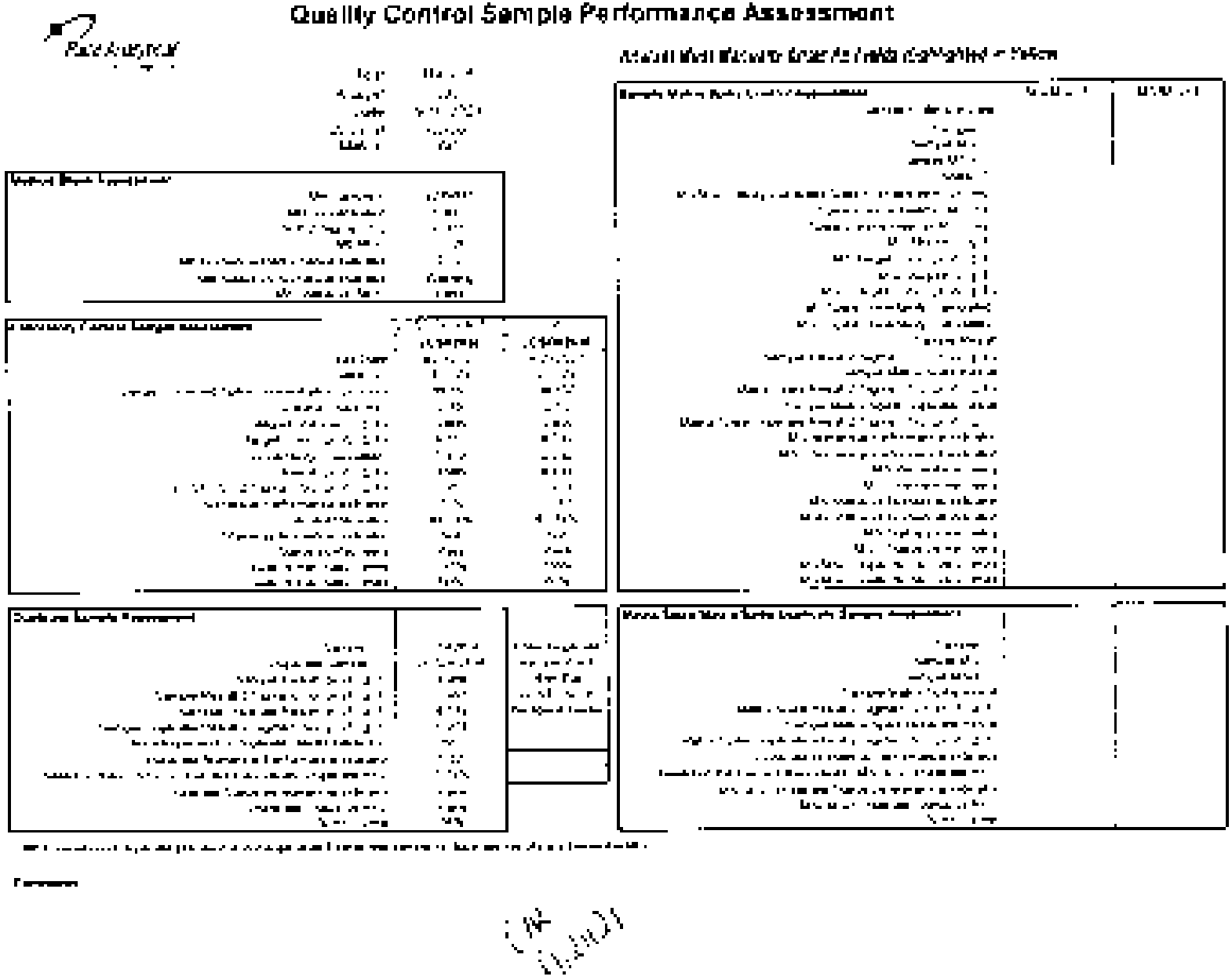
DATE Signed: 4/3/21

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

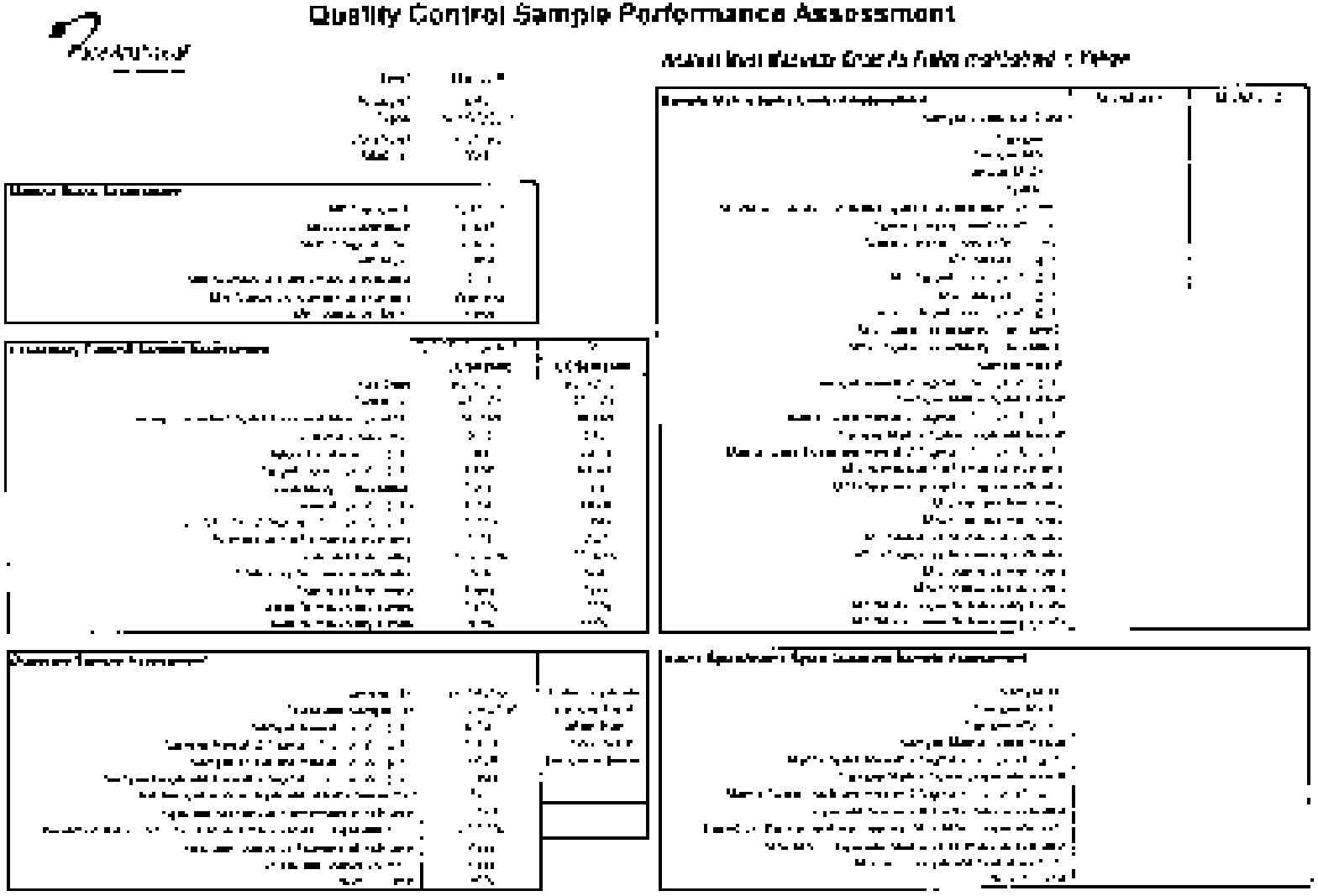
Quality Control Sample Performance Assessment



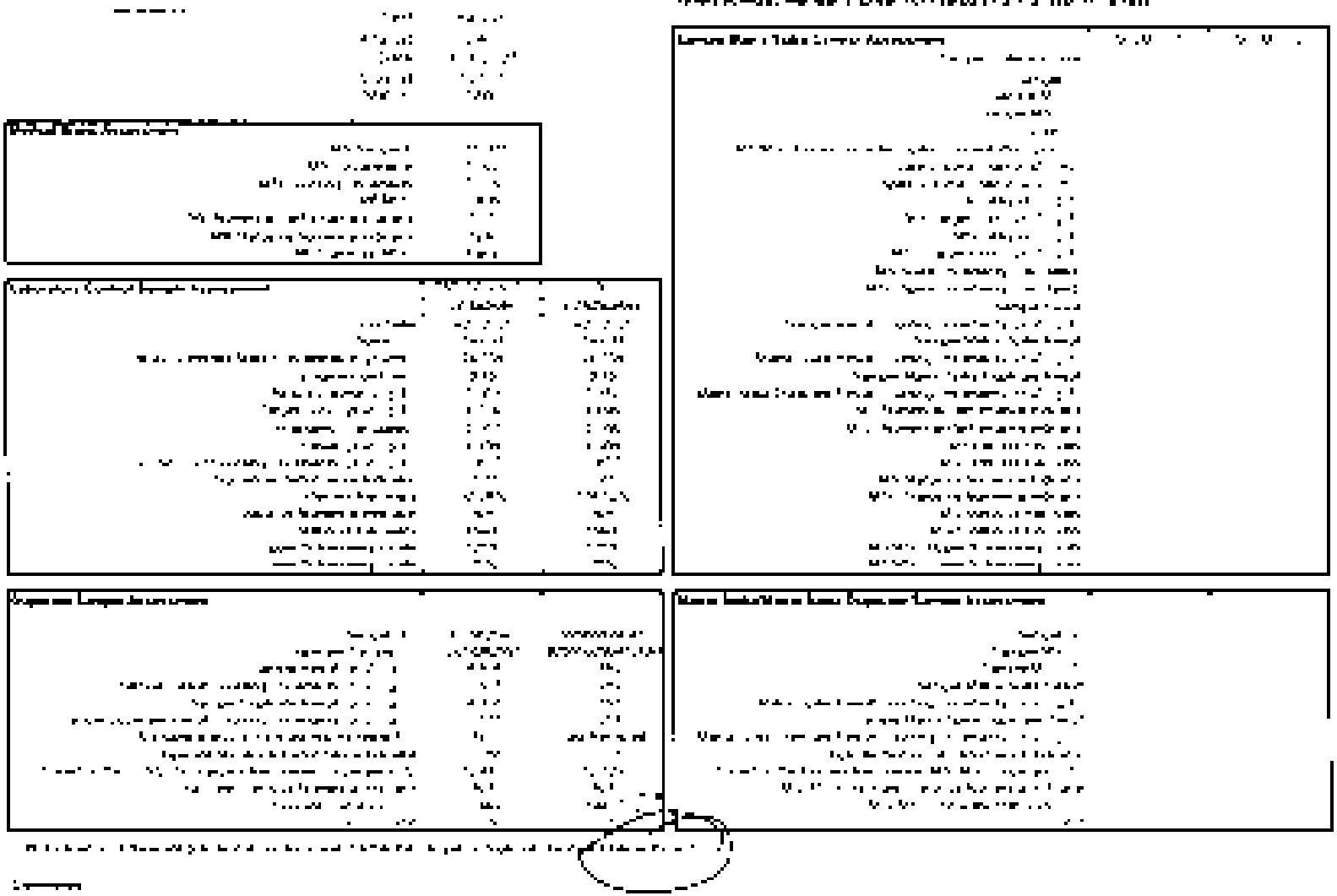
Quality Control Sample Performance Assessment



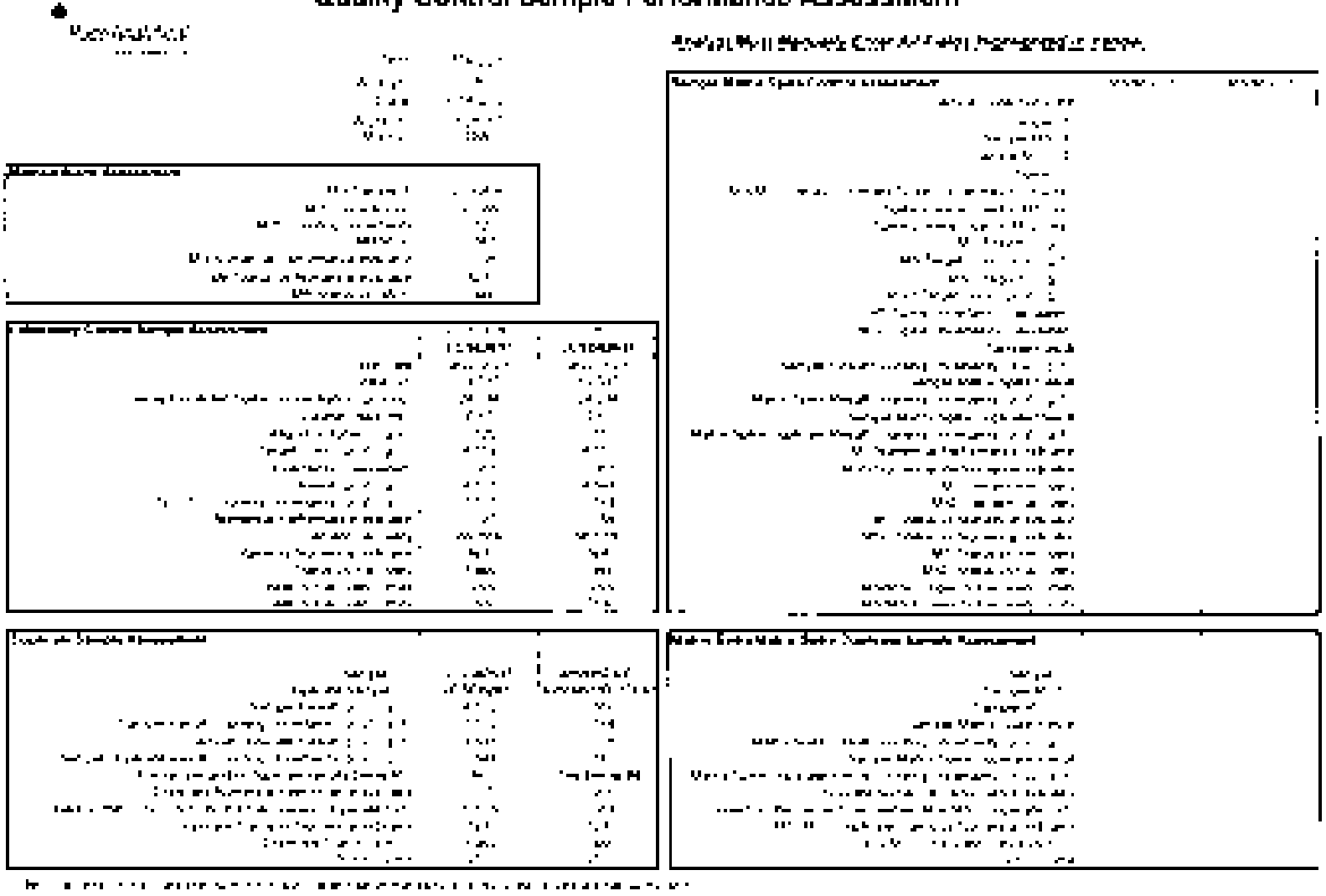
Quality Control Sample Performance Assessment



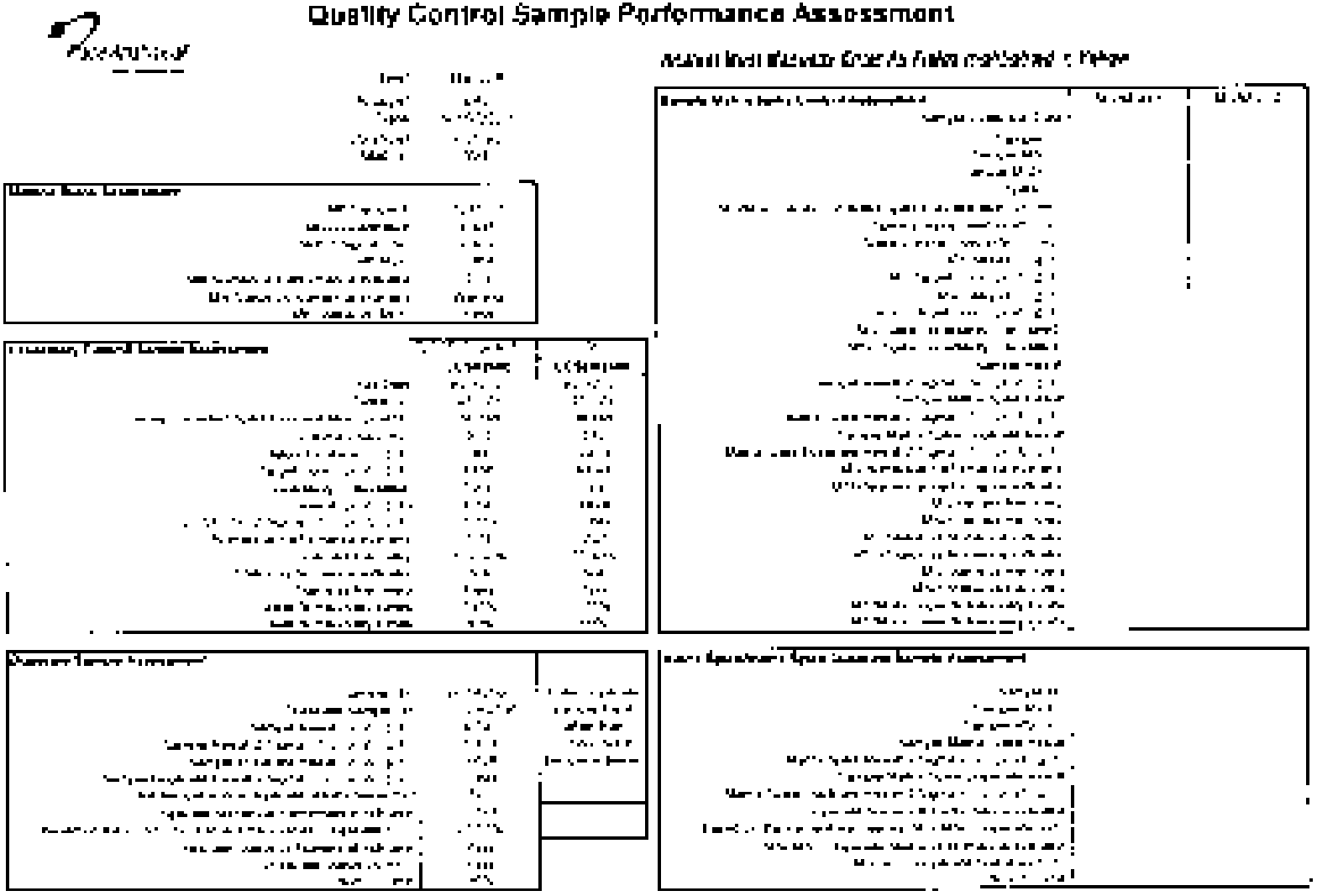
Quality Control Sample Performance Assessment



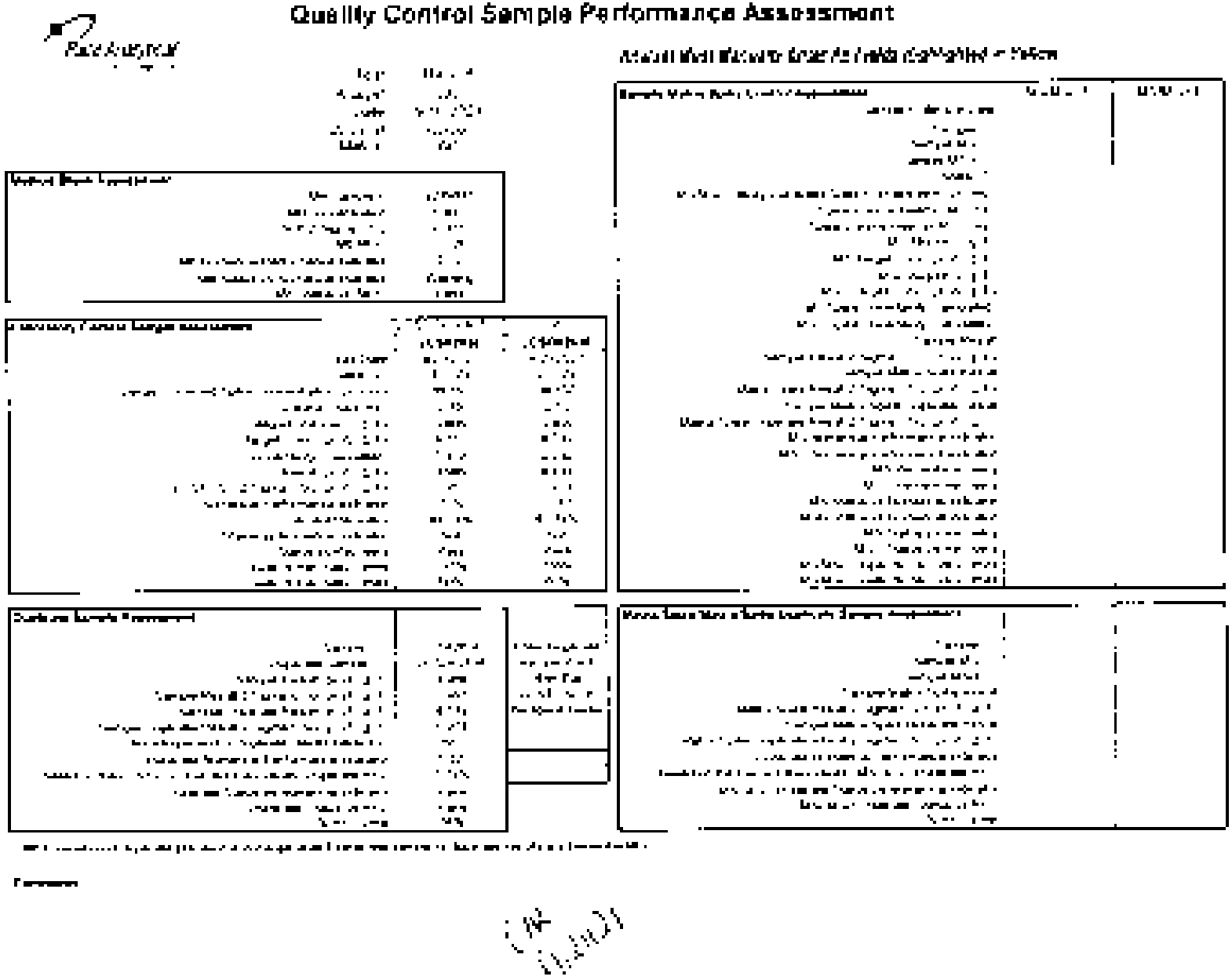
Quality Control Sample Performance Assessment1



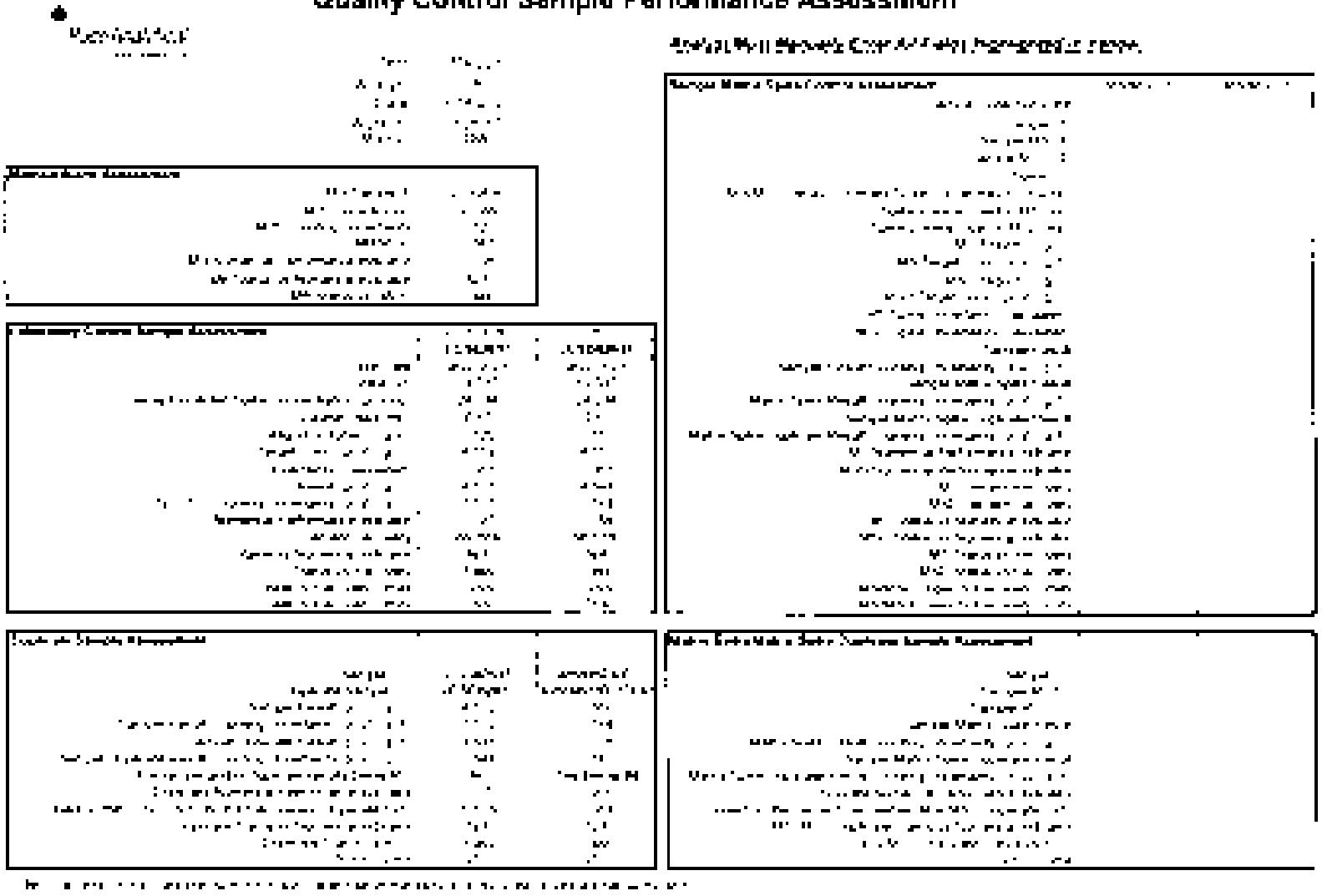
Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

October 12, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES
Pace Project No.: 92563762

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 28, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES
Pace Project No.: 92563762

Pace Analytical Services Charlotte
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92563762

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92563762001	**YGWC-43**	Water	09/27/21 12:12	09/28/21 16:28

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92563762

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92563762001	**YGWC-43**	EPA 6010D	DRB	1
		EPA 6020B	CW1	12
		EPA 7470A	VB	1
		SM 2540C-2011	ALW	1
		EPA 300.0 Rev 2.1 1993	CDC	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92563762

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563762001	**YGWC-43**					
	Performed by	CUSTOMER			09/28/21 17:36	
	pH	6.08	Std. Units		09/28/21 17:36	
	Turbidity	0.44	NTU		09/28/21 17:36	
EPA 6010D	Calcium	4.1	mg/L	1.0	10/05/21 17:25	
EPA 6020B	Barium	0.0097	mg/L	0.0050	10/06/21 17:02	
EPA 6020B	Beryllium	0.00015J	mg/L	0.00050	10/06/21 17:02	
EPA 6020B	Boron	0.64	mg/L	0.040	10/06/21 17:02	
EPA 6020B	Lithium	0.0092J	mg/L	0.030	10/06/21 17:02	
EPA 6020B	Molybdenum	0.0062J	mg/L	0.010	10/06/21 17:02	
EPA 7470A	Mercury	0.000090J	mg/L	0.00020	10/08/21 11:02	B
SM 2540C-2011	Total Dissolved Solids	158	mg/L	10.0	10/03/21 11:38	
EPA 300.0 Rev 2.1 1993	Chloride	1.1	mg/L	1.0	09/30/21 18:11	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	09/30/21 18:11	
EPA 300.0 Rev 2.1 1993	Sulfate	56.5	mg/L	1.0	09/30/21 18:11	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92563762

Sample: YGWC-43 **Lab ID: 92563762001** Collected: 09/27/21 12:12 Received: 09/28/21 16:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		09/28/21 17:36		
pH	**6.08**	Std. Units			1		09/28/21 17:36		
Turbidity	**0.44**	NTU			1		09/28/21 17:36		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**4.1**	mg/L	1.0	0.12	1	10/05/21 11:40	10/05/21 17:25	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	0.00078	1	10/05/21 13:00	10/06/21 17:02	7440-36-0	
Arsenic	ND	mg/L	0.0050	0.0011	1	10/05/21 13:00	10/06/21 17:02	7440-38-2	
Barium	**0.0097**	mg/L	0.0050	0.00067	1	10/05/21 13:00	10/06/21 17:02	7440-39-3	
Beryllium	**0.00015J**	mg/L	0.00050	0.000054	1	10/05/21 13:00	10/06/21 17:02	7440-41-7	
Boron	**0.64**	mg/L	0.040	0.0086	1	10/05/21 13:00	10/06/21 17:02	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	10/05/21 13:00	10/06/21 17:02	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	10/05/21 13:00	10/06/21 17:02	7440-47-3	
Cobalt	ND	mg/L	0.0050	0.00039	1	10/05/21 13:00	10/06/21 17:02	7440-48-4	
Lead	ND	mg/L	0.0010	0.00089	1	10/05/21 13:00	10/06/21 17:02	7439-92-1	
Lithium	**0.0092J**	mg/L	0.030	0.00073	1	10/05/21 13:00	10/06/21 17:02	7439-93-2	
Molybdenum	**0.0062J**	mg/L	0.010	0.00074	1	10/05/21 13:00	10/06/21 17:02	7439-98-7	
Selenium	ND	mg/L	0.0050	0.0014	1	10/05/21 13:00	10/06/21 17:02	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	**0.000090J**	mg/L	0.00020	0.000078	1	10/07/21 15:00	10/08/21 11:02	7439-97-6	B
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2011 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**158**	mg/L	10.0	10.0	1		10/03/21 11:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**1.1**	mg/L	1.0	0.60	1		09/30/21 18:11	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		09/30/21 18:11	16984-48-8	
Sulfate	**56.5**	mg/L	1.0	0.50	1		09/30/21 18:11	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92563762

QC Batch: 650835
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563762001

METHOD BLANK: 3412995 Matrix: Water
Associated Lab Samples: 92563762001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	10/05/21 15:22	

LABORATORY CONTROL SAMPLE: 3412996

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.1	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3412997 3412998

Parameter	Units	92563313021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	4.7	1	1	5.7	5.6	104	98	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92563762

QC Batch: 650898
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA

Associated Lab Samples: 92563762001

METHOD BLANK: 3413442 Matrix: Water
Associated Lab Samples: 92563762001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	10/06/21 15:21	
Arsenic	mg/L	ND	0.0050	0.0011	10/06/21 15:21	
Barium	mg/L	ND	0.0050	0.00067	10/06/21 15:21	
Beryllium	mg/L	ND	0.00050	0.000054	10/06/21 15:21	
Boron	mg/L	ND	0.040	0.0086	10/06/21 15:21	
Cadmium	mg/L	ND	0.00050	0.00011	10/06/21 15:21	
Chromium	mg/L	ND	0.0050	0.0011	10/06/21 15:21	
Cobalt	mg/L	ND	0.0050	0.00039	10/06/21 15:21	
Lead	mg/L	ND	0.0010	0.00089	10/06/21 15:21	
Lithium	mg/L	ND	0.030	0.00073	10/06/21 15:21	
Molybdenum	mg/L	ND	0.010	0.00074	10/06/21 15:21	
Selenium	mg/L	ND	0.0050	0.0014	10/06/21 15:21	

LABORATORY CONTROL SAMPLE: 3413443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.10	104	80-120	
Arsenic	mg/L	0.1	0.098	98	80-120	
Barium	mg/L	0.1	0.099	99	80-120	
Beryllium	mg/L	0.1	0.10	104	80-120	
Boron	mg/L	1	1.0	105	80-120	
Cadmium	mg/L	0.1	0.10	101	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.097	97	80-120	
Lead	mg/L	0.1	0.10	102	80-120	
Lithium	mg/L	0.1	0.10	102	80-120	
Molybdenum	mg/L	0.1	0.10	101	80-120	
Selenium	mg/L	0.1	0.099	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3413444 3413445

Parameter	Units	92563578001 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	108	75-125	1	20	
Arsenic	mg/L	ND	0.1	0.1	0.10	0.10	98	98	75-125	1	20	
Barium	mg/L	ND	0.1	0.1	0.11	0.11	102	100	75-125	1	20	
Beryllium	mg/L	ND	0.1	0.1	0.095	0.094	95	94	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92563762

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3413444 3413445

Parameter	Units	92563578001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	0.99	0.97	96	94	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.10	0.10	100	101	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.097	0.095	96	95	75-125	2	20	
Cobalt	mg/L	ND	0.1	0.1	0.095	0.093	95	93	75-125	2	20	
Lead	mg/L	ND	0.1	0.1	0.10	0.097	100	97	75-125	2	20	
Lithium	mg/L	ND	0.1	0.1	0.092	0.091	92	91	75-125	1	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.096	98	96	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92563762

QC Batch: 651444
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563762001

METHOD BLANK: 3416362 Matrix: Water
Associated Lab Samples: 92563762001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	0.000086J	0.00020	0.000078	10/08/21 10:19	

LABORATORY CONTROL SAMPLE: 3416363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0022	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3416364 3416365

Parameter	Units	92563578001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0020	0.0019	77	73	75-125	5	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92563762

QC Batch: 650392
QC Batch Method: SM 2540C-2011
Analysis Method: SM 2540C-2011
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92563762001

METHOD BLANK: 3411236 Matrix: Water
Associated Lab Samples: 92563762001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	10/03/21 11:38	

LABORATORY CONTROL SAMPLE: 3411237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	387	97	90-111	

SAMPLE DUPLICATE: 3411239

Parameter	Units	92563761007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	181	181	0	10	

SAMPLE DUPLICATE: 3412138

Parameter	Units	92563761002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1560	1580	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92563762

QC Batch: 650118
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: 92563762001

METHOD BLANK: 3409685 Matrix: Water
Associated Lab Samples: 92563762001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	09/30/21 12:38	
Fluoride	mg/L	ND	0.10	0.050	09/30/21 12:38	
Sulfate	mg/L	ND	1.0	0.50	09/30/21 12:38	

LABORATORY CONTROL SAMPLE: 3409686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	46.5	93	90-110	
Fluoride	mg/L	2.5	2.4	96	90-110	
Sulfate	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409687 3409688

Parameter	Units	92563859001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1030	50	50	1080	1090	110	129	90-110	1	10	M1
Fluoride	mg/L	ND	2.5	2.5	1.5	1.6	62	63	90-110	2	10	M1
Sulfate	mg/L	1290	50	50	1350	1370	124	150	90-110	1	10	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3409689 3409690

Parameter	Units	92563226004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.2	50	50	63.6	64.7	95	97	90-110	2	10	
Fluoride	mg/L	0.46	2.5	2.5	3.1	3.1	104	106	90-110	2	10	
Sulfate	mg/L	1170	50	50	1200	1200	65	48	90-110	1	10	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: YATES
Pace Project No.: 92563762

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92563762

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563762001	**YGWC-43**				
92563762001	**YGWC-43**	EPA 3010A	650835	EPA 6010D	650941
92563762001	**YGWC-43**	EPA 3005A	650898	EPA 6020B	650991
92563762001	**YGWC-43**	EPA 7470A	651444	EPA 7470A	651625
92563762001	**YGWC-43**	SM 2540C-2011	650392		
92563762001	**YGWC-43**	EPA 300.0 Rev 2.1 1993	650118		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Arcadis (GP Tower) Project #:

WO# : 92563762

92563762

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 4/23/21 HM

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: IR 204 ☐ Cont ☐ Blue ☐ None Type of Ice:

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) -0.1

Cooler Temp Corrected (°C): 2.4

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:	WT			
Headspace in VOA Vials (<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:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO#: 92563762**

PM: NMG Due Date: 10/12/21

CLIENT: GA-GA Power

Item	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)	BP2N -	BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VG9U-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1		1	1																					X				
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A – Required Client Information:
Company: [illegible]
Address: 27 E. Ross St
[illegible]
Email: [illegible]
Phone: Fax:
Requested Due Date:

Section B – Required Project Information:
Report To: [illegible]
Copy To: [illegible]
Purchase Order #:
Project Name: Yates
Project #:

Section C – Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: [illegible]
Pace Profile #: [illegible]

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	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	TDS	Cl, F, SO4	RAD 226/228	Residual Chlorine (Y/N)
1	YGWC-43	WT				1/27/21	1212			✓		✓							X	X	X	X	
2		WT																	X	X	X	X	
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
pH 6.08 of SAMPLE TURB 0.44	[signature]	1/28/21	11:28	[signature] PACE	1/27/21	11:28	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 11, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES RADS
Pace Project No.: 92563755

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on September 28, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES RADS
Pace Project No.: 92563755

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES RADS
Pace Project No.: 92563755

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92563755001	**YGWC-43**	Water	09/27/21 12:12	09/28/21 16:28

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Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92563755

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92563755001	**YGWC-43**	EPA 9315	JJY	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92563755

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92563755001	**YGWC-43**					
EPA 9315	Radium-226	1.11 ± 0.311 (0.267) C:78% T:NA	pCi/L		11/10/21 16:00	
EPA 9320	Radium-228	0.426 ± 0.395 (0.805) C:72% T:83%	pCi/L		11/02/21 14:17	
Total Radium Calculation	Total Radium	1.54 ± 0.706 (1.07)	pCi/L		11/10/21 17:46	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92563755

Sample: YGWC-43 **Lab ID: 92563755001** Collected: 09/27/21 12:12 Received: 09/28/21 16:28 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	**1.11 ± 0.311 (0.267) C:78% T:NA**	pCi/L	11/10/21 16:00	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.426 ± 0.395 (0.805) C:72% T:83%**	pCi/L	11/02/21 14:17	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.54 ± 0.706 (1.07)**	pCi/L	11/10/21 17:46	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92563755

QC Batch: 468246
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92563755001

METHOD BLANK: 2260780 Matrix: Water
Associated Lab Samples: 92563755001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0444 ± 0.0346 (0.179) C:69% T:NA	pCi/L	11/10/21 15:48	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92563755

QC Batch: 469297
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92563755001

METHOD BLANK: 2266088
Matrix: Water
Associated Lab Samples: 92563755001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.131 ± 0.351 (0.784) C:71% T:83%	pCi/L	11/02/21 11:13	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES RADS
Pace Project No.: 92563755

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES RADS
Pace Project No.: 92563755

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92563755001	**YGWC-43**	EPA 9315	468246		
92563755001	**YGWC-43**	EPA 9320	469297		
92563755001	**YGWC-43**	Total Radium Calculation	472087		

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Arcadis (GP Power) Project #:

WO# : 92563755

92563755

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ Other

Custody Seal Present? ☐ Yes ☐ No Seals Intact? ☐ Yes ☐ No

Date/Initials Person Examining Contents: 9/23/21 MC

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: IR-241 ☐ Wet ☐ Blue ☐ None Type of Ice:

Cooler Temp: 2.4 Correction Factor: Add/Subtract (°C) -0.1

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.4

USDA Regulated Soil (☐ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, HI, 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 analyses: Samples Field Filtered?	☐ Yes	☐ No	☐ N/A	8.
Sample Labels Match COC?	☐ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix:				
Headspace in VOA Vials (>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:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO#: 92563755**

PM: NMG Due Date: 10/19/21

CLIENT: GA-GA Power

Lead	BP4U-125 mL Plastic Unpreserved (N/A) (CL)	BP3N-250 mL Plastic Unpreserved (N/A)	BP3U-500 mL Plastic Unpreserved (N/A)	BP1U-1 Liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (CL)	BP4N-250 mL Plastic HNO3 (pH < 2)	BP4Z-375 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CL)	WGFU-Wide mouth Glass jar Unpreserved	AG1H-1 Liter Amber Unpreserved (N/A) (CL)	AG3U-1 liter Amber HCl (pH < 2)	AG3S-250 mL Amber Unpreserved (N/A) (CL)	AG1U-1 liter Amber Unpreserved (N/A) (CL)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG4S-125 mL Amber H2SO4 (pH < 2)	AG4U-125 mL Amber NaHSO4 (N/A) (CL)	VG9H-40 mL VOA HCl (N/A)	VG9U-40 mL VOA NaTiSO4 (N/A)	VG9T-40 mL VOA Unpres (N/A)	DG9M-40 mL VOA H2SO4 (N/A)	VG9U (8 vials per MFS-5035) kit (N/A)	VJG9T (3 vials per MFS-5035) kit (N/A)	WPDU-125 mL Plastic (N/A - lab)	WPDU-250 mL Plastic (N/A - lab)	- NICOL	BP4N-250 mL Plastic (H2SO4 (pH < 2))	AG0U-100 mL Amber Unpreserved Vials (N/A)	VSGU-20 mL Headspace vials (N/A)	DG8U-40 mL Amber Unpreserved Vials (N/A)
1																													
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at [illegible]

Page: 1 Of 1

Section A — Required Client Information:

Company:	[illegible]
Address:	[illegible]
[illegible]	
Email:	[illegible]
Phone:	Fax:
Requested Due Date:	

Section B — Required Project Information:

Report To:	[illegible]
Copy To:	[illegible]
Purchase Order #:	
Project Name:	[illegible]
Project #:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	[illegible]
Pace Profile #:	[illegible]

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE	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	TDS	Cl, F, SO4	RAD 9315/9320	Residual Chlorine (Y/N)
1	[illegible]	WT				[illegible]	[illegible]			✓		✓							X	X	X	X	
2		WT																	X	X	X	X	
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
pH 6.48 ; TURB 0.44 ; of SAMPLE	[signature]	[illegible]	[illegible]	[signature]	[illegible]	[illegible]	

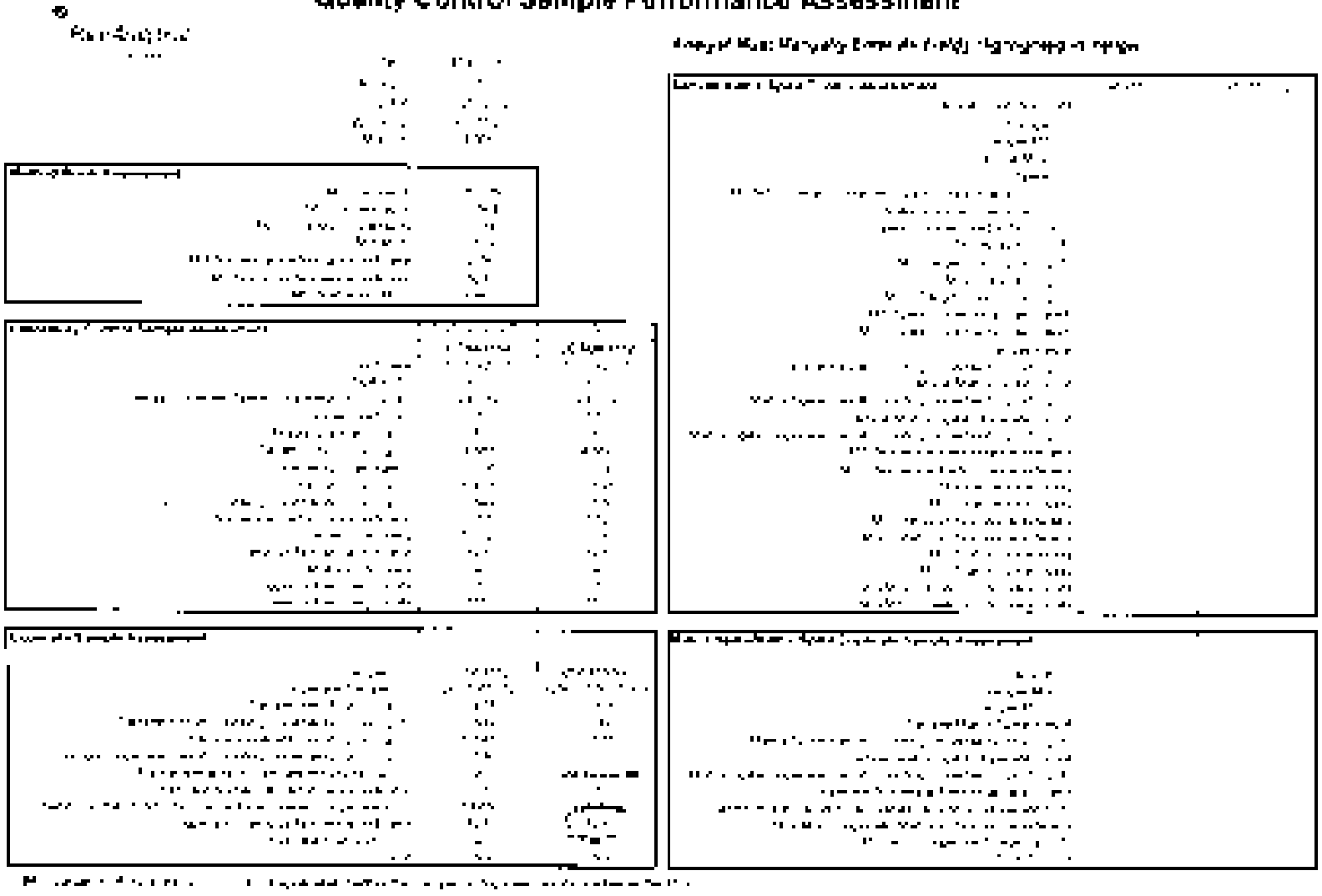
SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

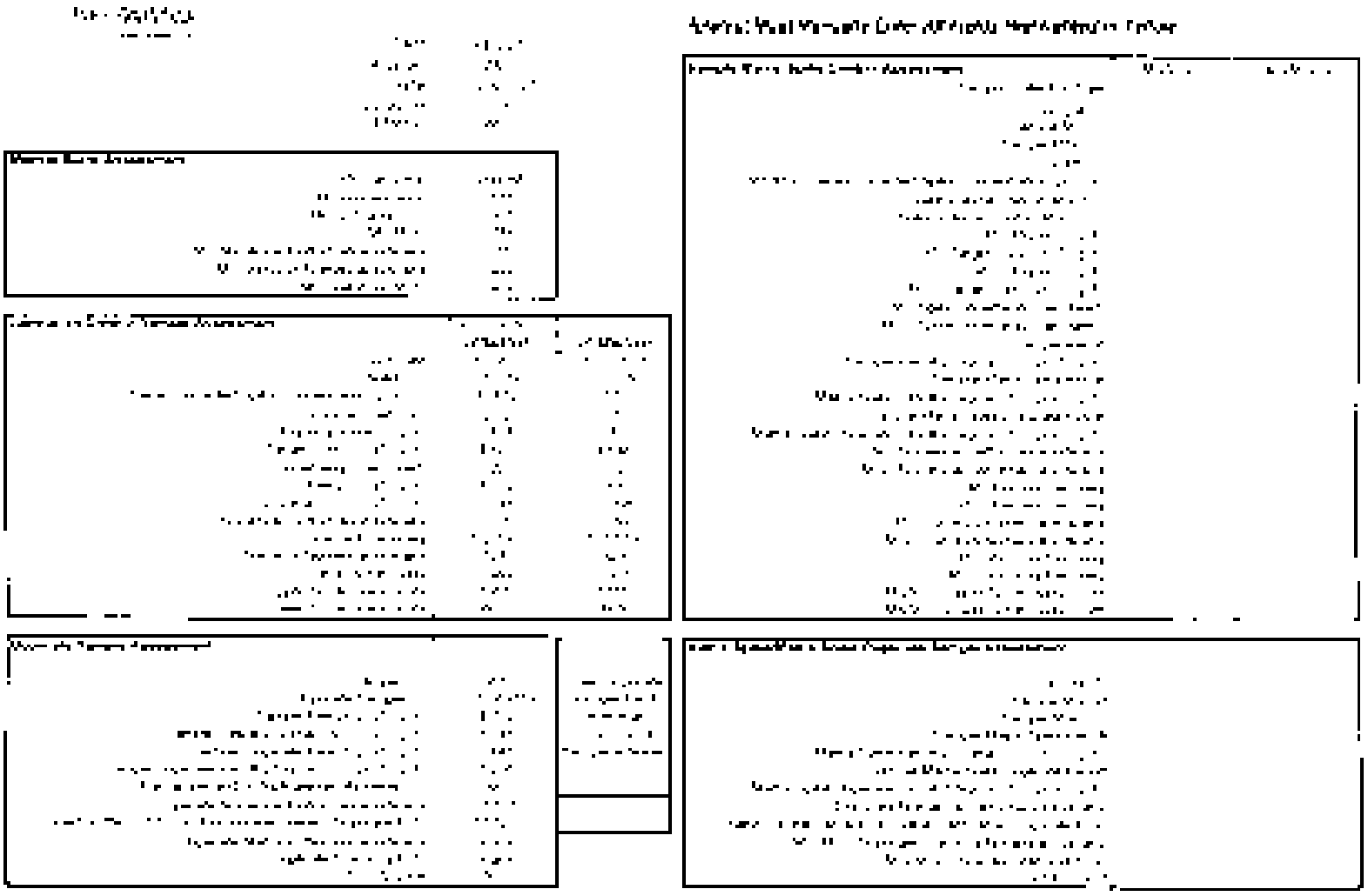
SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



November 2021

Georgia Power Co. – Plant Yates

Data Review Report

Metals, Radium, and General Chemistry Analyses

SDGs #92570779, 92570780, 92573150, and 92577105

Analyses Performed By:
Pace Analytical Services – Asheville, North Carolina
Pace Analytical Services – Peachtree Corners, Georgia
Pace Analytical Services – Greensburg, Pennsylvania

Report #43790R
Review Level: Tier II
Project: 30052922.00004

Summary

This Data Review Report summarizes the review of Sample Delivery Groups (SDGs) #92570779, 92570780, 92573150, and 92577105 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:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis		
						RAD	MET	GEN CHEM
92570779 92570780	PZ-52D	92570779001 92570780001	Water	11/4/2021		X	X	X
92573150	PZ-51	92573150001	Water	11/17/2021			X	
	YAMW-3	92573150002	Water	11/17/2021			X	
	EB-01	92573150003	Water	11/17/2021			X	
92577105	YAMW-3-W-12092021	92577105001	Water	12/9/2021			X	
	EB-01-12092021	92577105002	Water	12/9/2021			X	
	FB-01-12092021	92557105003	Water	12/9/2021			X	

Notes:

1. Metals and total dissolved solids (TDS) analysis performed by Pace Analytical Services – Peachtree Corners, Georgia. The metals analysis for SDGs #92573150 and 92577105 included lithium by method SW-846 6020B.
2. Anions (chloride, fluoride, and sulfate) and alkalinity analysis performed by Pace Analytical Services – Asheville, North Carolina.
3. Radium analysis performed by Pace Analytical Services – Greensburg, Pennsylvania.
4. pH analysis performed as a field measurement.

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA = quality assurance

Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010D, 6020B, 7470A, 9315, and 9320; Standard Method (SM) SM4500-H+ B and SM2540C; and USEPA Method 300.0. Data were reviewed in accordance with USEPA Region IV Data Validation Standard Operating Procedures for Contract Laboratory Program Inorganic Data by Inductively Coupled Plasma–Atomic Emission Spectroscopy and Inductively Coupled Plasma–Mass Spectroscopy (September 2011, Rev. 2), and USEPA National Functional Guidelines NFG for Inorganic Superfund Methods Data Review, EPA-540-R-20-006 (November 2020).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
  - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
  - E The reported value is estimated due to the presence of interference.
  - N Spiked sample recovery is not within control limits.
  - * Duplicate analysis is not within control limits.
- Validation Qualifiers
  - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
  - UB Analyte considered non-detect at the listed value due to associated blank contamination.
  - R The sample results are rejected.

Two facts should be noted by all data users. First, the “R” flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. “R” values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if

it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Metals Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D/6020B	Water	180 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.
SW-846 7470A	Water	28 days from collection to analysis	Cool to <6°C; preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Metals were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater.

SDGs #92570779 and 92573150: MS/MSD analysis was not performed using a sample from these SDGs.

SDG #92577105: The MS/MSD analysis performed using sample YAMW-3-W-12092021 in association with dissolved lithium 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.

SDGs #92570779 and 92573150: Laboratory duplicate or MS/MSD analysis was not performed using a sample from these SDGs.

SDG #92577105: MS/MSD analysis was performed on sample YAMW-3-W-12092021 in association with dissolved lithium analysis in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited an acceptable RPD.

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.

A field duplicate sample was not collected in association with these SDGs.

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. General Assessment – Total vs. Dissolved

When the dissolved concentration exceeded the associated total concentration, and both results were five times greater than the RL, then the %D between the total and dissolved concentrations must be less than 10%.

SDG #92573150: The difference in the total and the dissolved sample results was within the control limits in association with the analysis of sample YAMW-3.

SDG #92577105: The difference in the total and the dissolved sample results was within the control limits in association with the analysis of sample YAMW-3-W-12092021.

7. 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) Cold Vapor Atomic Absorption (CVAA)					
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
Total vs. Dissolved		X		X	

Notes:

%R Percent recovery

RPD Relative percent difference

General Chemistry Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
pH by SM4500-H+ B	Water	ASAP	Cool to <6°C
Total Dissolved Solids (TDS) by SM2540C	Water	7 days from collection to analysis	Cool to <6°C
Chloride, Fluoride, and Sulfate by USEPA 300.0	Water	28 days from collection to analysis	Cool to <6°C

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

MS/MSD analysis was not performed using a sample from this SDG.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

Laboratory duplicate or MS/MSD analysis was not performed using a sample from this SDG.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

A field duplicate sample was not collected in association with this SDG.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for General Chemistry

General Chemistry: SM4500-H+ B, SM2540C, USEPA 300.0	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method Blanks		X		X	
B. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R	X				X
Matrix Spike Duplicate (MSD) %R	X				X
MS/MSD Precision (RPD)	X				X
Laboratory Duplicate (RPD)	X				X
Field Duplicate (RPD)	X				X

Notes:
%R Percent recovery
RPD Relative percent difference

Radiological Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Radium-226 by SW-846 9315	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.
Radium-228 by SW-846 9320	Water	180 days from collection to analysis	Preserved to a pH of less than 2 s.u.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and field/rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Field/rinse blanks measure contamination of samples during field operations.

Blank results should be verified to be accurately reported and that tolerance limits (±2 sigma or standard deviation) were not exceeded; and blank results verified to be less than the reporting limit (RL) of 1 pCi/L.

For blanks to be considered not applicable, verify net blank results are less than the associated uncertainty by evaluating the blank results based on the following three criteria. If either of these criteria is true, the blank is considered not suspect of contamination (or non-detect).

1. Is the blank result less than the uncertainty and less than the minimum detectable concentration (MDC)?
2. Does the blank have an uncertainty greater than the result (or indistinguishable from background) or does the blank result fall between its uncertainty and its MDC?

If the blank QC results fall outside the appropriate tolerance limits or if the net blank results are not less than the associated uncertainty, the following equation for normalized absolute difference (NAD) should be used in determining the effect of possible blank contamination on the sample results:

$$Normalized\ \ absolute\ difference_{\ MethodBlank} = \frac{|\ Sample\ -\ Blank\ |}{\sqrt{(U_{Sample}\ )^2 + (U_{Blank}\ )^2}}$$

Where:

U_{Sample} = uncertainty of the sample

U_{Blank} = uncertainty of the blank

Sample = concentration of isotope in sample

Blank = concentration of isotope in blank

Normalized Absolute Difference	Qualification
> 2.58	None
1.96 > x < 2.58	J
x < 1.96	J*

Note:
* = Minimally the result should be qualified as estimated, J; however, if other quality indicators are deficient the validator may determine the result should be qualified as rejected, R

Radium-228 and Radium-226 were detected in the QA blanks.

- The Radium-226 activity was measured as less than the uncertainty and MDC as described above. Hence, the Radium-226 blank result is considered non-detect and no qualification of the results was required.
- The Radium-228 activity was measured as greater than the uncertainty and MDC. NAD was calculated using the equation shown above and was determined to be < 1.96. The Radium-228 and Total Radium results in sample PZ-52D was qualified as estimated “J”.

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:

$$Z_{lab} = \frac{x_1 - x_2}{\sqrt{u^2(x_1) + u^2(x_2)}}$$

Where:

x_1, x_2 = two measured activity concentrations.

$u^2(x_1)$, $u^2(x_2)$ = the combined standard uncertainty of each measurement squared.

Duplicate sample performance is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

Laboratory duplicate analysis was not performed using a sample from this SDG.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. There are no specific review criteria for radiological field replicate analyses comparability. The degree of agreement between these replicates is to be used in conjunction with all of the remaining quality control results as an aid in the decision as to the overall quality of the data. Data are not to be qualified due to field replicates alone. To determine the level of agreement between the replicates, the following guidelines have been established:

For all analyses in soil matrices, data should be considered in agreement if results are within a factor of four of each other. Data between a factor of four and five of each other should be considered as a minor discrepancy and data greater than a factor of five should be considered a major discrepancy.

A field duplicate sample was not collected in association with this SDG.

5. Tracer or Carrier

Tracers and carriers are used in radiological separation methods to provide evaluation of chemical separation. Chemical yield is evaluated through the recovery of chemical species spiked into samples. Yield is evaluated radiometrically with a tracer and gravimetrically with a carrier. A control limit of 30% to110% is applied to each sample spiked with either a carrier and/or a tracer.

The tracer and carrier analyses exhibited recoveries within the control limits.

6. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS/LCSD analysis must exhibit a percent recovery between the control limits of 60% to 135%. In the event the recovery is outside of this limit, a numerical indicator to make assessments is calculated, with a limit of +/- 3 sigma.

The numerical performance indicator for a laboratory control sample is calculated by:

$$Z_{lcs} = \frac{x - c}{\sqrt{u^2(x) + u^2(c)}}$$

Where:

x = Analytical result of the LCS

c = Known concentration of the LCS

$u^2(x)$ = combined standard uncertainty of the result squared.

$u^2(c)$ = combined standard uncertainty of the LCS value squared.

LCS performance is acceptable when the numerical performance indicator calculation yields a value between ±3 sigma. Warning limits have been established as ±2 sigma.

The LCS/LCSD analysis exhibited recoveries within the control limits.

7. Isotope Identification

For sample results to be considered “non-detect”, evaluate data based on the following two criteria. If either one of these criteria is true, the sample result is considered “non-detect”.

1. Sample result is less than the uncertainty and less than the MDC/MDA; or
2. Sample has an uncertainty greater than the result (or indistinguishable from background) or result falls between its uncertainty and its MDC/MDA.

Based on the above criteria, the Radium-228 and total Radium results in sample PZ-52D should be considered non-detect.

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: January 3, 2022

PEER REVIEW: Dennis Capria

DATE: January 5, 2022

Chain of Custody / Data Qualifier Summary Table

Pace Analytical®

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis (GA Power)	Report To:	Augie Panineilo	Attention:	
Address:	2?? E. New St.	Copy To:		Company Name:	
Winder, GA 30680				Address:	
Email:	Augusta.Panineilo@arcadis.com	Purchase Order #:		Pace Quote:	
Phone:	Fax:	Project Name:	Yates	Pace Project Manager:	nicole.d'oleo@pacelabs.com
Requested Due Date:		Project #:		Pace Profile #:	10643

Regulatory Agency
State / Location
GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	App III/IV Metals	TDS	Cl, F, SO4	RAD 9315/9320	Residual Chlorine (Y/N)
1	PD-020	WT		[illegible]	1245				5	3		2							X	X	X	X	
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

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

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[illegible]	[signature]	[illegible]	1650	[signature] / Pace	[illegible]	1650	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain-of-custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A — Required Client Information:
Company: Georgia Power
Address: 3535 Peoples Ferry Rd
City, GA, 30288
Email: geoffrey.gray@southernco.com
Phone: (404)467-2983 Fax:
Requested Due Date: 4B hr TAT

Section B — Required Project Information:
Report To: Geoffrey Gray
Copy To:
Purchase Order #:
Project Name: Yates
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: nicole.d'alessandro@pacelabs.com
Pace Profile #: 10841

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9, /, -) Sample IDs must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test: Lithium Only	Lithium Only	Residual Chlorine (Y/N)	
1	PZ-01	WT				4/16/25	1407		1			X							X		
2	YMW-1	WT				4/16/25	1407		2			X							X		Field Filtered Dissolved Sample
3	[illegible]					[illegible]	[illegible]		4												
4	EB-01					4/16/25	[illegible]		1			X							X		
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
4B hr TAT Rush	Geoff Gray	4/16/25	1604	[illegible]	4/16/25	1605	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

Temp in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A — Required Client Information:
Company: Arcadis (GA Power)
Address: 1720 Kimberly Dr SW
Arcadis, GA 30008
Email: grant.wolfford@arcadis.com
Phone: 678.647.6400 Fax:
Requested Due Date: Standard TAT

Section B — Required Project Information:
Report To: Grant Wolford
Copy To:
Purchase Order #:
Project Name: Yates
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager: nicole.Fowler@pacelabs.com
Pace Profile #: 10940

Regulatory Agency:
State / Location: GA

Requested Analysis Filtered (Y/N): Y

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: 6020 LI	Dissolved Li	Residual Chlorine (Y/N)
1	YAMW-3-LI-11092021	WT	G	11/9/21	1045	11/9/21	1047		2			X						X	X	
2	EB-01-11092021	WT	G	11/9/21	1130				1			X						X		
3	FB-01-11092021	WT	G	11/9/21	1140				1			X						X		
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
WC send lab report to coffeyGA@arcadis.com	Grant Wolford Arcadis	11/10/21	0934	[illegible]	11/10/21		

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Grant Wolford
SIGNATURE of SAMPLER:
DATE Signed: 11/10/2021

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SDG	Sample ID	Method	Analyte	Result	Units	Validation Qualifier	Reason for Validation Qualifier
92570779	No qualifiers assigned						
92570780	PZ-52D	SW-846 9320	Radium-228	0.257 ± 0.404	pCi/L	J	Blank contamination
		Total Radium calculation	Total Radium	0.721 ± 0.665	pCi/L	J	Blank contamination
92573150	No qualifiers assigned						
92577105	No qualifiers assigned						

Abbreviations:
pCi/L = picoCuries per liter

Qualifiers:
J = estimated value

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 18, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES
Pace Project No.: 92570779

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on November 04, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES
Pace Project No.: 92570779

Pace Analytical Services Charlotte
South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

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SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92570779

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92570779001	**PZ-52D**	Water	11/04/21 12:41	11/04/21 16:50

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(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92570779

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92570779001	**PZ-52D**	EPA 6010D	DRB	1
		EPA 6020B	KH	12
		EPA 7470A	VB	1
		SM 2540C-2015	ALW	1
		EPA 300.0 Rev 2.1 1993	JCM	3

PASI-A = Pace Analytical Services - Asheville
PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92570779

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92570779001	**PZ-52D**					
	Performed by	CUSTOMER			11/18/21 13:06	
	pH	6.62	Std. Units		11/18/21 13:06	
EPA 6010D	Calcium	25.6	mg/L	1.0	11/09/21 17:25	
EPA 6020B	Arsenic	0.0019J	mg/L	0.0050	11/12/21 15:36	
EPA 6020B	Barium	0.026	mg/L	0.0050	11/12/21 15:36	
EPA 6020B	Boron	0.69	mg/L	0.040	11/12/21 15:36	
EPA 6020B	Cobalt	0.00082J	mg/L	0.0050	11/12/21 15:36	
EPA 6020B	Lead	0.0010	mg/L	0.0010	11/12/21 15:36	
EPA 6020B	Lithium	0.016J	mg/L	0.030	11/12/21 15:36	
EPA 6020B	Molybdenum	0.012	mg/L	0.010	11/12/21 15:36	
EPA 6020B	Selenium	0.0034J	mg/L	0.0050	11/12/21 15:36	
SM 2540C-2015	Total Dissolved Solids	426	mg/L	10.0	11/09/21 13:15	
EPA 300.0 Rev 2.1 1993	Chloride	9.5	mg/L	1.0	11/06/21 22:19	
EPA 300.0 Rev 2.1 1993	Fluoride	0.10	mg/L	0.10	11/06/21 22:19	
EPA 300.0 Rev 2.1 1993	Sulfate	191	mg/L	4.0	11/07/21 19:25	

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92570779

Sample: PZ-52D **Lab ID: 92570779001** Collected: 11/04/21 12:41 Received: 11/04/21 16:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		11/18/21 13:06		
pH	**6.62**	Std. Units			1		11/18/21 13:06		
6010D ATL ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Peachtree Corners, GA								
Calcium	**25.6**	mg/L	1.0	0.12	1	11/09/21 12:22	11/09/21 17:25	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	0.00078	1	11/10/21 11:56	11/12/21 15:36	7440-36-0	
Arsenic	**0.0019J**	mg/L	0.0050	0.0011	1	11/10/21 11:56	11/12/21 15:36	7440-38-2	
Barium	**0.026**	mg/L	0.0050	0.00067	1	11/10/21 11:56	11/12/21 15:36	7440-39-3	
Beryllium	ND	mg/L	0.00050	0.000054	1	11/10/21 11:56	11/12/21 15:36	7440-41-7	
Boron	**0.69**	mg/L	0.040	0.0086	1	11/10/21 11:56	11/12/21 15:36	7440-42-8	
Cadmium	ND	mg/L	0.00050	0.00011	1	11/10/21 11:56	11/12/21 15:36	7440-43-9	
Chromium	ND	mg/L	0.0050	0.0011	1	11/10/21 11:56	11/12/21 15:36	7440-47-3	
Cobalt	**0.00082J**	mg/L	0.0050	0.00039	1	11/10/21 11:56	11/12/21 15:36	7440-48-4	
Lead	**0.0010**	mg/L	0.0010	0.00089	1	11/10/21 11:56	11/12/21 15:36	7439-92-1	
Lithium	**0.016J**	mg/L	0.030	0.00073	1	11/10/21 11:56	11/12/21 15:36	7439-93-2	
Molybdenum	**0.012**	mg/L	0.010	0.00074	1	11/10/21 11:56	11/12/21 15:36	7439-98-7	
Selenium	**0.0034J**	mg/L	0.0050	0.0014	1	11/10/21 11:56	11/12/21 15:36	7782-49-2	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Peachtree Corners, GA								
Mercury	ND	mg/L	0.00020	0.000078	1	11/10/21 14:30	11/11/21 12:09	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Peachtree Corners, GA								
Total Dissolved Solids	**426**	mg/L	10.0	10.0	1		11/09/21 13:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Rev 2.1 1993 Pace Analytical Services - Asheville								
Chloride	**9.5**	mg/L	1.0	0.60	1		11/06/21 22:19	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		11/06/21 22:19	16984-48-8	
Sulfate	**191**	mg/L	4.0	2.0	4		11/07/21 19:25	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658492
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D ATL
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92570779001

METHOD BLANK: 3451224 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Calcium	mg/L	ND	1.0	0.12	11/09/21 16:17	

LABORATORY CONTROL SAMPLE: 3451225

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	mg/L	1	1.0	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3451226 3451227

Parameter	Units	92570510020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	mg/L	26900 ug/L	1	1	28.0	27.7	110	83	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658792
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92570779001

METHOD BLANK: 3452768 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0030	0.00078	11/12/21 14:00	
Arsenic	mg/L	ND	0.0050	0.0011	11/12/21 14:00	
Barium	mg/L	ND	0.0050	0.00067	11/12/21 14:00	
Beryllium	mg/L	ND	0.00050	0.000054	11/12/21 14:00	
Boron	mg/L	ND	0.040	0.0086	11/12/21 14:00	
Cadmium	mg/L	ND	0.00050	0.00011	11/12/21 14:00	
Chromium	mg/L	ND	0.0050	0.0011	11/12/21 14:00	
Cobalt	mg/L	ND	0.0050	0.00039	11/12/21 14:00	
Lead	mg/L	ND	0.0010	0.00089	11/12/21 14:00	
Lithium	mg/L	ND	0.030	0.00073	11/12/21 14:00	
Molybdenum	mg/L	ND	0.010	0.00074	11/12/21 14:00	
Selenium	mg/L	ND	0.0050	0.0014	11/12/21 14:00	

LABORATORY CONTROL SAMPLE: 3452769

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	mg/L	0.1	0.11	111	80-120	
Arsenic	mg/L	0.1	0.10	102	80-120	
Barium	mg/L	0.1	0.11	107	80-120	
Beryllium	mg/L	0.1	0.10	102	80-120	
Boron	mg/L	1	1.0	100	80-120	
Cadmium	mg/L	0.1	0.10	102	80-120	
Chromium	mg/L	0.1	0.10	102	80-120	
Cobalt	mg/L	0.1	0.10	104	80-120	
Lead	mg/L	0.1	0.10	105	80-120	
Lithium	mg/L	0.1	0.11	107	80-120	
Molybdenum	mg/L	0.1	0.11	107	80-120	
Selenium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3452770 3452771

Parameter	Units	92570961001 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	0.10	105	104	75-125	1	20	
Arsenic	mg/L	1.7J ug/L	0.1	0.1	0.10	0.10	103	103	75-125	0	20	
Barium	mg/L	54.1J ug/L	0.1	0.1	0.16	0.16	109	102	75-125	4	20	
Beryllium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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Peachtree Corners, GA 30092
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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3452770 3452771

Parameter	Units	92570961001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron	mg/L	ND	1	1	0.98	1.0	97	99	75-125	2	20	
Cadmium	mg/L	ND	0.1	0.1	0.099	0.098	99	98	75-125	1	20	
Chromium	mg/L	ND	0.1	0.1	0.10	0.11	101	105	75-125	4	20	
Cobalt	mg/L	ND	0.1	0.1	0.11	0.11	106	105	75-125	1	20	
Lead	mg/L	ND	0.1	0.1	0.099	0.10	99	101	75-125	2	20	
Lithium	mg/L	3.4J ug/L	0.1	0.1	0.10	0.11	100	103	75-125	3	20	
Molybdenum	mg/L	ND	0.1	0.1	0.11	0.099	106	98	75-125	7	20	
Selenium	mg/L	ND	0.1	0.1	0.099	0.10	99	100	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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110 Technology Parkway
Peachtree Corners, GA 30092
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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658716
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92570779001

METHOD BLANK: 3452442 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00020	0.000078	11/11/21 11:05	

LABORATORY CONTROL SAMPLE: 3452443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.0025	0.0024	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3452444 3452445

Parameter	Units	92569467029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	0.0025	0.0025	0.0025	0.0024	98	96	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 658465
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: 92570779001

METHOD BLANK: 3451097 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	11/09/21 13:10	

LABORATORY CONTROL SAMPLE: 3451098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	400	376	94	80-120	

SAMPLE DUPLICATE: 3451099

Parameter	Units	92570215002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	75.0	82.0	9	25	

SAMPLE DUPLICATE: 3451100

Parameter	Units	92570749003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	249	249	0	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92570779

QC Batch: 657854
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: 92570779001

METHOD BLANK: 3448274 Matrix: Water
Associated Lab Samples: 92570779001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	11/06/21 15:35	
Fluoride	mg/L	ND	0.10	0.050	11/06/21 15:35	
Sulfate	mg/L	ND	1.0	0.50	11/06/21 15:35	

LABORATORY CONTROL SAMPLE: 3448275

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	45.2	90	90-110	
Fluoride	mg/L	2.5	2.5	100	90-110	
Sulfate	mg/L	50	47.5	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448276 3448277

Parameter	Units	92570531001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.5	50	50	51.8	52.1	93	93	90-110	1	10	
Fluoride	mg/L	0.098J	2.5	2.5	2.6	2.6	99	99	90-110	0	10	
Sulfate	mg/L	48.5	50	50	97.6	97.8	98	99	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448278 3448279

Parameter	Units	92570531011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16.3	50	50	62.8	62.9	93	93	90-110	0	10	
Fluoride	mg/L	0.071J	2.5	2.5	2.4	2.5	95	95	90-110	1	10	
Sulfate	mg/L	10.6	50	50	59.8	60.0	98	99	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: YATES
Pace Project No.: 92570779

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92570779

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92570779001	**PZ-52D**				
92570779001	**PZ-52D**	EPA 3010A	658492	EPA 6010D	658495
92570779001	**PZ-52D**	EPA 3005A	658792	EPA 6020B	658798
92570779001	**PZ-52D**	EPA 7470A	658716	EPA 7470A	659043
92570779001	**PZ-52D**	SM 2540C-2015	658465		
92570779001	**PZ-52D**	EPA 300.0 Rev 2.1 1993	657854		

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CI-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Arcadis

Project #: WO# : 92570779

92570779

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other: ☐ Client

Custody Seal Present? ☐ Yes ☐ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 11/9/21 KDW

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: THR214 ☐ Wet ☐ Blue ☐ None **Type of Ice:**

Cooler Temp: 2.8 **Correction Factor: Add/Subtract (°C):** +0

Cooler Temp Corrected (°C): 2.8

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:	WT			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 1
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO# : 92570779**

PM: NMD Due Date: 11/18/21

CLIENT: GR-GR Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4C-125 mL Plastic H2SO4 (pH < 2) (D)	BP4N-250 mL plastic HNO3 (pH < 2)	BP4S-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (CN)	WPDU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (U)	AG1H-1 liter Amber HCl (pH < 2)	AG1U-250 mL Amber Unpreserved (N/A) (U)	AG2S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3AB(DG8A)-250 mL Amber NAHSO (N/A)(CH)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA NaTiO3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H2SO4 (N/A)	VG9M (8 vials per kit)-MeOH Kit (N/A)	VG9D (8 vials per kit)-NaHSO4 Kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)	BP1N-250 mL Plastic (NaOH+Ascorbic Acid) (S & N)	AG0U-100 mL Amber Unpreserved (N/A)	WGKU-32 mL Scintillation Vials (N/A)	BG3U-40 mL Amber Unpreserved (N/A)
1		1				1																			2			
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of the 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.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A — Required Client Information:

Company:	Arcadis (GA Power)
Address:	2113, New St.
	Winder, GA 30680
Email:	Augusta.Panimelli@arcadis.com
Phone:	Fax:
Requested Due Date:	

Section B — Required Project Information:

Report To:	Augie Panimelli
Copy To:	
Purchase Order #:	
Project Name:	Yates
Project #:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote:	
Pace Project Manager:	nicole.d'oleo@pacelabs.com
Pace Profile #:	10840

Regulatory Agency	
State / Location	GA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE	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	TDS	Cl, F, SO4	RAD 9315/9320	Residual Chlorine (Y/N)
1	PZ-S20	WT		11/4/21	1245				5	3		2						X	X	X	X	
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

Matrix codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
[illegible]		11/4/21	1650	[illegible] Pace	11/4/21	1650	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 29, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES RADS
Pace Project No.: 92570780

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on November 04, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Ted Wall, Arcadis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES RADS
Pace Project No.: 92570780

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES RADS
Pace Project No.: 92570780

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92570780001	**PZ-52D**	Water	11/04/21 12:41	11/04/21 16:50

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES RADS
Pace Project No.: 92570780

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92570780001	**PZ-52D**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES RADS
Pace Project No.: 92570780

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92570780001	**PZ-52D**					
EPA 9315	Radium-226	0.464 ± 0.261 (0.398) C:96% T:NA	pCi/L		12/02/21 08:59	
EPA 9320	Radium-228	0.257 ± 0.404 (0.876) C:68% T:90%	pCi/L		12/21/21 11:26	
Total Radium Calculation	Total Radium	0.721 ± 0.665 (1.27)	pCi/L		12/23/21 16:22	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92570780

Sample: PZ-52D **Lab ID: 92570780001** Collected: 11/04/21 12:41 Received: 11/04/21 16:50 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	**0.464 ± 0.261 (0.398) C:96% T:NA**	pCi/L	12/02/21 08:59	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.257 ± 0.404 (0.876) C:68% T:90%**	pCi/L	12/21/21 11:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.721 ± 0.665 (1.27)**	pCi/L	12/23/21 16:22	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92570780

QC Batch: 473479
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92570780001

METHOD BLANK: 2286784
Matrix: Water
Associated Lab Samples: 92570780001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0316 ± 0.0734 (0.173) C:94% T:NA	pCi/L	12/02/21 08:59	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL - RADIOCHEMISTRY

Project: YATES RADS
Pace Project No.: 92570780

QC Batch: 475650
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92570780001

METHOD BLANK: 2297613
Matrix: Water
Associated Lab Samples: 92570780001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.529 ± 0.291 (0.510) C:72% T:99%	pCi/L	12/21/21 11:28	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES RADS
Pace Project No.: 92570780

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES RADS
Pace Project No.: 92570780

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92570780001	**PZ-52D**	EPA 9315	473479		
92570780001	**PZ-52D**	EPA 9320	475650		
92570780001	**PZ-52D**	Total Radium Calculation	477408		

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Arcadis

Project #:

WO#: 92570780

92570780

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other: ☐ Client

Custody Seal Present? ☐ Yes ☐ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: 11/4/21 KDW

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☐ N/A

Thermometer: ☐ IR Gun ID: T#2214

Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp: 2.8 **Correction Factor: Add/Subtract (°C):** +0

Cooler Temp Corrected (°C): 2.8

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:	N			
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☐ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

Project # **WO# : 92570780**

PM: NMG Due Date: 11/29/21

CLIENT: GA-GA Power

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL (plastic HNO3 (pH < 2)	BP2Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	Ventpur 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)	AG3A(DRO/8015)-250 mL Amber NaHSO4 (N/A)(Cl-)	DG9M-40 mL VOA H2O (N/A)	VG9T-40 mL VOA NaTh2O3 (N/A)	VG9M-40 mL VOA MeOH (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VORAX (6 vials per kit)-5035 kit (N/A)	VJGX (3 vials per kit)-Wheaton kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - 5d)	SP2T-250 mL Sterile Plastic (N/A - 5d)	NCDS	BP1N-250 mL Plastic (NH4)2SO4 (0.1-0.5)	AG0U-100 mL Amber Unpreserved vials (N/A)	VG4U-40 mL Scintillation vials (N/A)	BG3U-60 mL Amber Unpreserved vials (N/A)
1		1	1			1																			X			
2																												
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Arcadis (GA Power)	Report To: Augie Fennelly	Attention:	
Address: 27 E. Pine St.	Copy To:	Company Name:	Regulatory Agency
Winder, GA 30680		Address:	
Email: Augusta.Fennelly@arcadis.com	Purchase Order #	Pace Quote:	
Phone: Fax:	Project Name: Yates	Pace Project Manager: nicole.d'new@arcadis.com	State / Location
Requested Due Date:	Project #:	Pace Profile #: 10841	GA

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample IDs must be unique	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analysis Test	TOR	Requested Analysis Filtered (Y/N):										Residual Chlorine (Y/N)	
1	P2-SW	WT		11/4/21	1344				5	X		HC						X	X	X	X										
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
no 7		11/4/21	1662		11/4/21	1150	

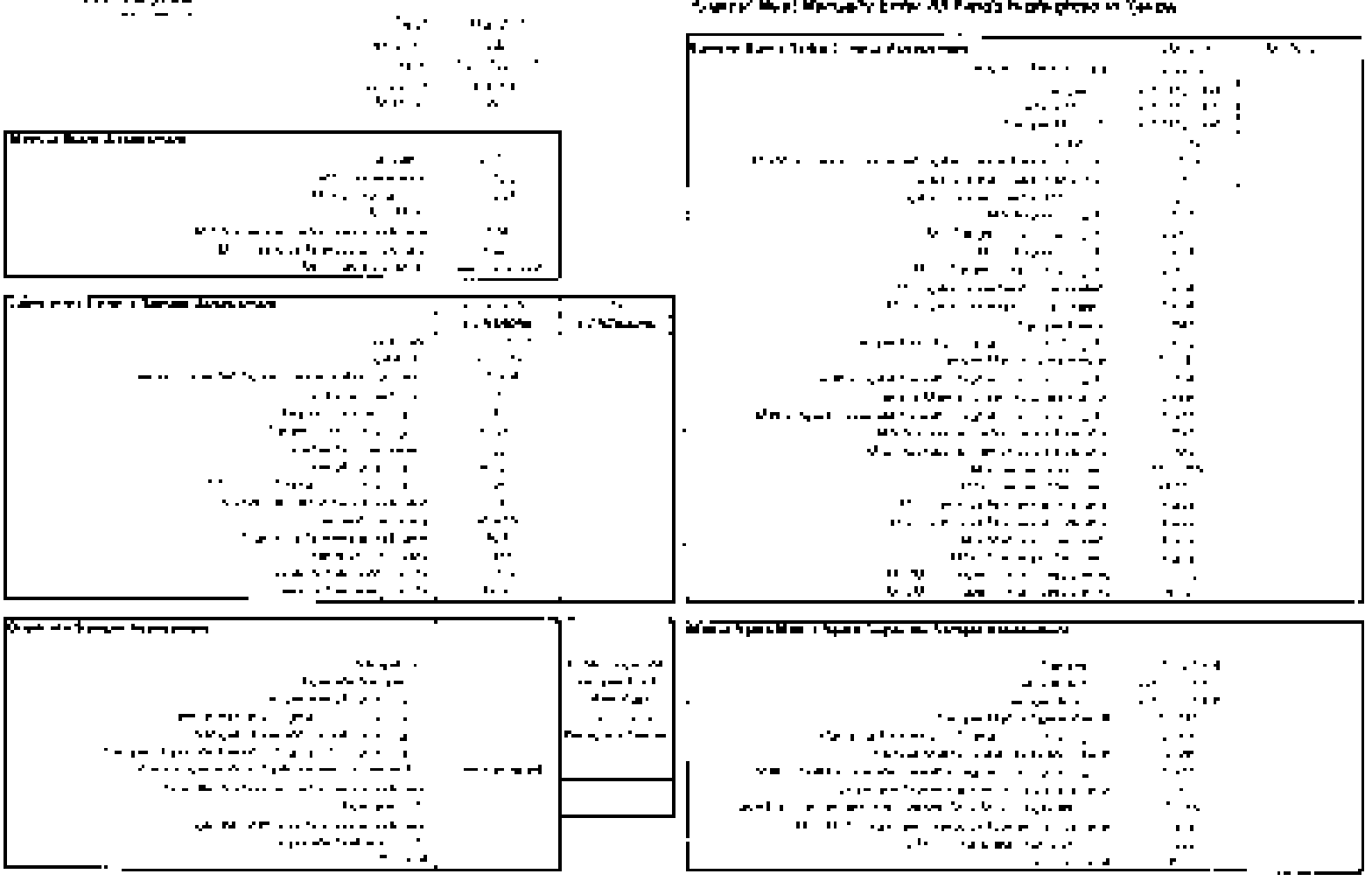
SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

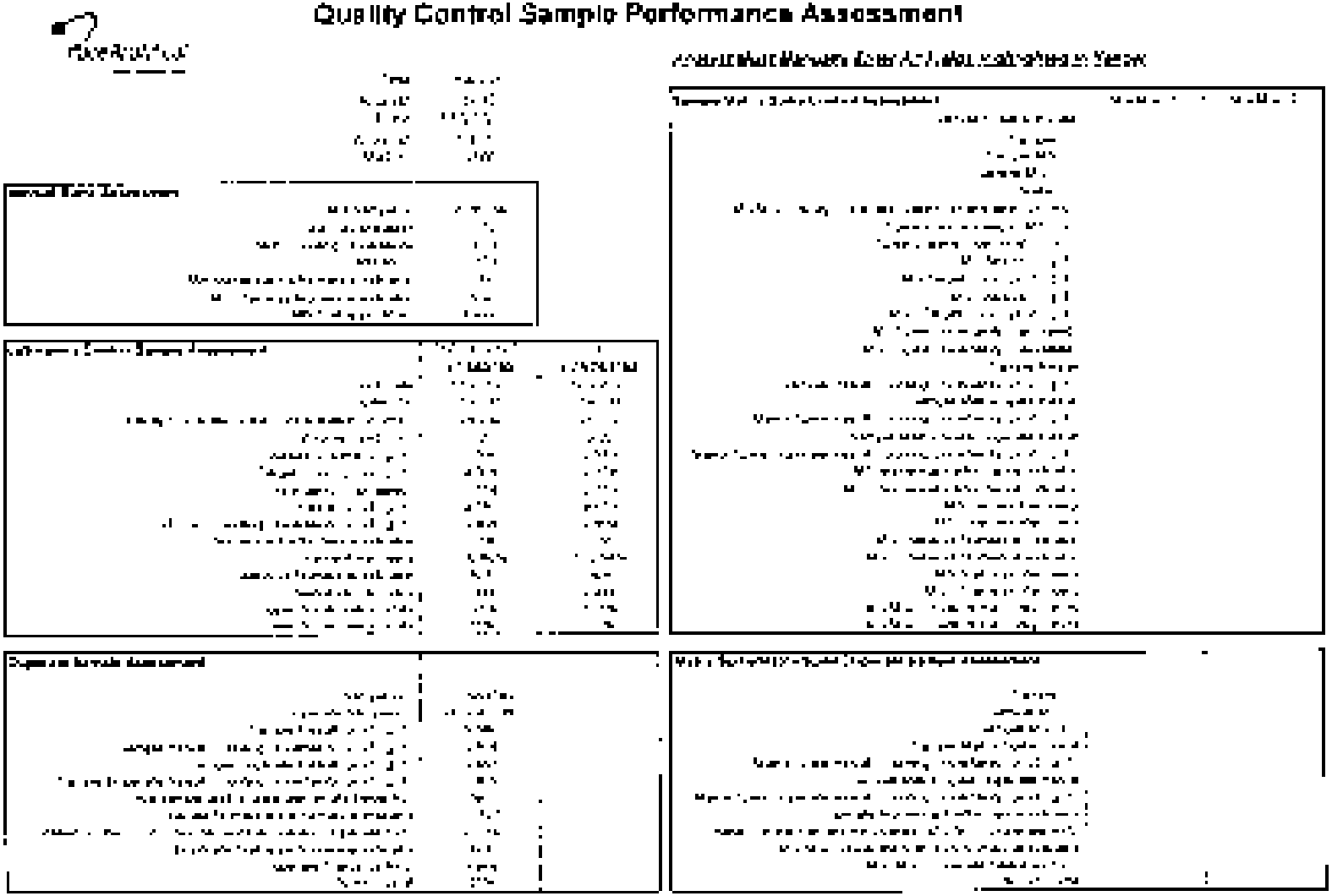
SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Quality Control Sample Performance Assessment



Quality Control Sample Performance Assessment



Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

November 22, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES
Pace Project No.: 92573150

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on November 18, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte
- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Maribel Vital

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES
Pace Project No.: 92573150

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

Pace Analytical Services Peachtree Corners

110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92573150

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92573150001	**PZ-51**	Water	11/17/21 17:48	11/18/21 10:00
92573150002	**YAMW-3**	Water	11/17/21 16:07	11/18/21 10:00
92573150003	**EB-01**	Water	11/17/21 16:20	11/18/21 10:00

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92573150

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92573150001	**PZ-51**	EPA 6020B	CW1	1
92573150002	**YAMW-3**	EPA 6020B	CW1	1
		EPA 6020B	CW1	1
92573150003	**EB-01**	EPA 6020B	CW1	1

PASI-C = Pace Analytical Services - Charlotte
PASI-GA = Pace Analytical Services - Peachtree Corners, GA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92573150

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92573150001	**PZ-51**					
	Performed by	CUSTOMER			11/18/21 12:44	
	pH	6.15	Std. Units		11/18/21 12:44	
EPA 6020B	Lithium	0.0049J	mg/L	0.030	11/19/21 19:34	
92573150002	**YAMW-3**					
	Performed by	CUSTOMER			11/18/21 12:44	
	pH	6.01	Std. Units		11/18/21 12:44	
EPA 6020B	Lithium	0.046	mg/L	0.030	11/20/21 14:30	
EPA 6020B	Lithium, Dissolved	0.047	mg/L	0.030	11/19/21 15:56	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92573150

Sample: PZ-51 **Lab ID: 92573150001** Collected: 11/17/21 17:48 Received: 11/18/21 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		11/18/21 12:44		
pH	**6.15**	Std. Units			1		11/18/21 12:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.0049J**	mg/L	0.030	0.00073	1	11/18/21 12:52	11/19/21 19:34	7439-93-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92573150

Sample: YAMW-3 **Lab ID: 92573150002** Collected: 11/17/21 16:07 Received: 11/18/21 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Field Data	Analytical Method: Pace Analytical Services - Charlotte								
Performed by	**CUSTOMER**				1		11/18/21 12:44		
pH	**6.01**	Std. Units			1		11/18/21 12:44		
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.046**	mg/L	0.030	0.00073	1	11/18/21 12:52	11/20/21 14:30	7439-93-2	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium, Dissolved	**0.047**	mg/L	0.030	0.00073	1	11/18/21 11:56	11/19/21 15:56	7439-93-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92573150

Sample: EB-01 **Lab ID: 92573150003** Collected: 11/17/21 16:20 Received: 11/18/21 10:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	ND	mg/L	0.030	0.00073	1	11/18/21 12:52	11/19/21 20:04	7439-93-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92573150

QC Batch: 660609
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92573150001, 92573150002, 92573150003

METHOD BLANK: 3461472 Matrix: Water
Associated Lab Samples: 92573150001, 92573150002, 92573150003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.030	0.00073	11/19/21 17:41	

LABORATORY CONTROL SAMPLE: 3461473

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.1	0.12	117	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3461474 3461475

Parameter	Units	92572746001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	ND	0.1	0.1	0.12	0.12	117	116	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92573150

QC Batch: 660611
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92573150002

METHOD BLANK: 3461481 Matrix: Water
Associated Lab Samples: 92573150002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium, Dissolved	mg/L	ND	0.030	0.00073	11/19/21 14:38	

LABORATORY CONTROL SAMPLE: 3461482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium, Dissolved	mg/L	0.1	0.10	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3461483 3461484

Parameter	Units	92572944005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium, Dissolved	mg/L	31.2J ug/L	0.1	0.1	0.13J	0.13J	96	97	75-125		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES
Pace Project No.: 92573150

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92573150

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92573150001	**PZ-51**				
92573150002	**YAMW-3**				
92573150001	**PZ-51**	EPA 3005A	660609	EPA 6020B	660862
92573150002	**YAMW-3**	EPA 3005A	660609	EPA 6020B	660862
92573150003	**EB-01**	EPA 3005A	660609	EPA 6020B	660862
92573150002	**YAMW-3**	EPA 3005A	660611	EPA 6020B	660834

Pace Analytical	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: October 28, 2020 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.07	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Georgia Power

Project #: WO# : 92573150

92573150

Courier: ☐ Commercial ☐ Fed Ex ☐ Pace ☐ UPS ☐ USPS ☐ Other: ☑ Client

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Date/Initials Person Examining Contents: MT 10/31/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☐ IR Gun ID: 093

Type of Ice: ☐ Wet ☐ Blue ☐ None

Cooler Temp: 3.4 Correction Factor: Add/Subtract (°C) +0.3

Cooler Temp Corrected (°C): 3.7

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. 48 Hr Rush
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: WT				
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottles**

Project

WO#: 92573150

PM: NMG Due Date: 11/22/21

CLIENT: GA-GA Power

Item#	BP1U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP2U-250 mL Plastic Unpreserved (N/A)	BP3U-500 mL Plastic Unpreserved (N/A)	BP4U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (3 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1						✓ 1																						
2						✓ 1																						
3						✓ 1																						
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A — Required Client Information:
Company: Georgia Power
Address: 2839 Paces Ferry Rd.
Atlanta, GA 30339
Email:
Phone: (404)457-2983 Fax:
Requested Due Date: 48 hr TAT

Section B — Required Project Information:
Report To: Geoffrey Gay
Copy To:
Purchase Order #:
Project Name: Yates
Project #:

Section C — Invoice Information:
Attention:
Company Name:
Address:
Pace Quote:
Pace Project Manager:
Pace Profile #: 10840

Regulatory Agency:
State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	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	Lithium Only	Diss. Lithium	Residual Chlorine (Y/N)	
1	PZ-01	WT				[illegible]	[illegible]		1			1							x	[illegible]		
2	YGWA-1	WT				[illegible]	[illegible]		2			2							x	X		Field Filtered Dissolved Sample
3	~~[illegible]~~					[illegible]	[illegible]															
4	EB-01					[illegible]	[illegible]		1			Y							X			
5																						
6																						
7																						
8																						
9																						
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
48 hr TAT Rush	Geoff Gay	[illegible]	1024	[illegible]	11/18	1020	

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:
DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

December 2021

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

December 21, 2021

Ms. Lauren Petty
Southern Company
42 Inverness Center Parkway
Birmingham, AL 35242

RE: Project: YATES
Pace Project No.: 92577105

Dear Ms. Petty:

Enclosed are the analytical results for sample(s) received by the laboratory on December 10, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Peachtree Corners, GA

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Joju Abraham, Georgia Power-CCR
Lauren Coker, Georgia Pwer
Geoffrey Gay, ARCADIS - Atlanta
Kristen Jurinko
Kelley Sharpe, ARCADIS - Atlanta
Alex Simpson, Arcadis
Samantha Thomas
Ted Wall, Arcadis

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

CERTIFICATIONS

Project: YATES
Pace Project No.: 92577105

Pace Analytical Services Peachtree Corners
110 Technology Pkwy, Peachtree Corners, GA 30092
Florida DOH Certification #: E87315
Georgia DW Inorganics Certification #: 812
North Carolina Certification #: 381
South Carolina Certification #: 98011001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE SUMMARY

Project: YATES
Pace Project No.: 92577105

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92577105001	**YAMW-3-W-12092021**	Water	12/09/21 16:27	12/10/21 09:24
92577105002	**EB-01-12092021**	Water	12/09/21 16:38	12/10/21 09:24
92577105003	**FB-01-12092021**	Water	12/09/21 16:40	12/10/21 09:24

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SAMPLE ANALYTE COUNT

Project: YATES
Pace Project No.: 92577105

Lab ID	Sample ID	Method	Analysts	Analytes Reported
92577105001	**YAMW-3-W-12092021**	EPA 6020B	CW1	1
		EPA 6020B	CW1	1
92577105002	**EB-01-12092021**	EPA 6020B	CW1	1
92577105003	**FB-01-12092021**	EPA 6020B	CW1	1

PASI-GA = Pace Analytical Services - Peachtree Corners, GA

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

SUMMARY OF DETECTION

Project: YATES
Pace Project No.: 92577105

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92577105001	**YAMW-3-W-12092021**					
EPA 6020B	Lithium	0.042	mg/L	0.030	12/15/21 14:56	
EPA 6020B	Lithium, Dissolved	0.043	mg/L	0.030	12/20/21 15:19	

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92577105

Sample: YAMW-3-W-12092021 **Lab ID: 92577105001** Collected: 12/09/21 16:27 Received: 12/10/21 09:24 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	**0.042**	mg/L	0.030	0.00073	1	12/14/21 09:52	12/15/21 14:56	7439-93-2	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium, Dissolved	**0.043**	mg/L	0.030	0.00073	1	12/20/21 10:31	12/20/21 15:19	7439-93-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92577105

Sample: EB-01-12092021 **Lab ID: 92577105002** Collected: 12/09/21 16:38 Received: 12/10/21 09:24 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	ND	mg/L	0.030	0.00073	1	12/14/21 09:52	12/14/21 18:53	7439-93-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

ANALYTICAL RESULTS

Project: YATES
Pace Project No.: 92577105

Sample: FB-01-12092021 **Lab ID: 92577105003** Collected: 12/09/21 16:40 Received: 12/10/21 09:24 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3005A Pace Analytical Services - Peachtree Corners, GA								
Lithium	ND	mg/L	0.030	0.00073	1	12/14/21 09:52	12/14/21 18:59	7439-93-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92577105

QC Batch: 665921
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92577105001, 92577105002, 92577105003

METHOD BLANK: 3488550 Matrix: Water
Associated Lab Samples: 92577105001, 92577105002, 92577105003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium	mg/L	ND	0.030	0.00073	12/14/21 16:12	

LABORATORY CONTROL SAMPLE: 3488551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium	mg/L	0.1	0.10	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3488552 3488553

Parameter	Units	92577311001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium	mg/L	ND	0.1	0.1	0.11	0.12	109	116	75-125	7	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA

Project: YATES
Pace Project No.: 92577105

QC Batch: 667255
QC Batch Method: EPA 3005A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET Dissolved
Laboratory: Pace Analytical Services - Peachtree Corners, GA
Associated Lab Samples: 92577105001

METHOD BLANK: 3495441 Matrix: Water
Associated Lab Samples: 92577105001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Lithium, Dissolved	mg/L	ND	0.030	0.00073	12/20/21 15:08	

LABORATORY CONTROL SAMPLE: 3495442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lithium, Dissolved	mg/L	0.1	0.097	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3495443 3495444

Parameter	Units	92577105001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lithium, Dissolved	mg/L	0.042	0.1	0.1	0.15	0.14	105	99	75-125	4	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALIFIERS

Project: YATES
Pace Project No.: 92577105

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.

Pace Analytical Services, LLC
110 Technology Parkway
Peachtree Corners, GA 30092
(770)734-4200

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: YATES
Pace Project No.: 92577105

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92577105001	**YAMW-3-W-12092021**	EPA 3005A	665921	EPA 6020B	665974
92577105002	**EB-01-12092021**	EPA 3005A	665921	EPA 6020B	665974
92577105003	**FB-01-12092021**	EPA 3005A	665921	EPA 6020B	665974
92577105001	**YAMW-3-W-12092021**	EPA 3005A	667255	EPA 6020B	667263

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☑ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Arcadis GA Power

Project #:

WO# : 92577105

92577105

Courier: ☐ Commercial ☐ Fed Ex ☐ UPS ☐ USPS ☐ Pace ☐ Other: ☑ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: MJT 10/30/21

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 095 ☑ Wet ☐ Blue ☐ None **Type of Ice:**

Cooler Temp: 3.1 **Correction Factor:** Add/Subtract (°C) ±0.3

Cooler Temp Corrected (°C): 3.4

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:	WT			
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	10
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

Pace Analytical	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: November 15, 2021 Page 2 of 2
	Document No.: F-CAR-CS-033-Rev.08	Issuing Authority: Pace Carolinas Quality Office

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, Lling

**Bottom half of box is to list number of bottles

Project # **WO# : 92577105**

PM: NMG Due Date: 12/21/21

CLIENT: GA-GA Power

Items#	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)	BP4N-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)	WGKU-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)	AG2S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG9H)-250 mL Amber NaHSO (N/A)(SC)	DG9H-40 mL VOA HCl (N/A)	VG9H-40 mL VOA H2SO4 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9H-40 mL VOA H2SO4 (N/A)	VG9A (3 vials per MQ) 40 mL VOA NaHSO4 (N/A)	VG9D (3 vials per MQ) 40mL VOA NH4Cl (N/A)	SP5T-125 mL Sterile Plastic (N/A - Lab)	SP5T-250 mL Sterile Plastic (N/A - Lab)		BP3A-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Headspace vials (N/A)	DG9Q-40 mL Amber Unpreserved vials (N/A)
1						2																						
2						2																						
3						2																						
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina 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.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Page: 1 Of 1

Section A — Required Client Information:
- Company: Arcadis (GA Power)
- Address: 1704 Kimberly Dr. SW
- Marietta, GA 30008
- Email: [illegible]@arcadis.com
- Phone: [illegible] Fax
- Requested Due Date: Standard TAT

Section B — Required Project Information:
- Report To: Grant Willford
- Copy To:
- Purchase Order #:
- Project Name: Yates
- Project #:

Section C — Invoice Information:
- Attention:
- Company Name:
- Address:
- Pace Quote:
- Pace Project Manager: nicole.[illegible]@pacelabs.com
- Pace Profile #: 10940

Regulatory Agency:

State / Location: GA

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE	START DATE	START TIME	END DATE	END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	6020 Li	Dissolved Li	Residual Chlorine (Y/N)
1	YAMW-3-W-12092021	WG	[illegible]	[illegible]	1615	[illegible]	1617		2			X						X	X	
2	EB-01-12092021	WG	[illegible]	[illegible]	1630				1			X						X		
3	FB-01-12092021	WG	[illegible]	[illegible]	1640				1			X						X		
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Requested Analysis Filtered (Y/N): Dissolved Li — Y

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Pls send lab report to [illegible]@arcadis.com	Grant Willford / Arcadis	12/10/21	0834	[illegible] / Pace	12/10/2021		

SAMPLER NAME AND SIGNATURE
- PRINT Name of SAMPLER: Grant Willford
- SIGNATURE of SAMPLER: [signature]
- DATE Signed: 12/10/2021

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Appendix E

Statistical Analysis

Appendix III Statistically Significant Increase Summary (March 2021)

Appendix III Parameter	March 2021
Boron	YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43
Calcium	YGWC-38, YGWC-42
Chloride	YGWC-24SA
pH	YGWC-41
Sulfate	YGWC-38, YGWC-42, YGWC-43
Total Dissolved Solids	YGWC-38, YGWC-41, YGWC-42, YGWC-43

March 2021

GROUNDWATER STATS CONSULTING

August 24, 2021

Southern Company Services
Attn: Ms. Lauren Coker
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, GA 30308-3374

Re: Plant Yates Ash Management Area (AMA) and R6 CCR Landfill
March 2021 Statistical Analysis

Dear Ms. Coker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the March 2021 semi-annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant Yates Ash Management Area (AMA) and R6 CCR Landfill. 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-23S, YGWC-24SA, YGWC-36A, YGWC-38, YGWC-41, YGWC-42, YGWC-43, YGWC-49
- **Delineation wells:** YAMW-1, YAMW-2, YAMW-4, YAMW-5, PZ-35, and PZ-37

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters. When a minimum of 4 samples is available, delineation wells are evaluated using confidence intervals for the Appendix IV constituents.

Well YGWC-24SA was installed in June 2020 as a replacement well for YGWC-24S and well YGWC-36A was installed in September 2020 as a replacement well for YGWC-36 to supplement existing data for each respective well. In all cases, concentrations from both wells are below established MCLs. When a minimum of 8 samples have been collected from new well YGWC-36A, the Mann-Whitney test of medians will be used to evaluate whether the medians of data from both wells are statistically similar. In cases where there are statistically significant differences, the historical record will be truncated so that only data from new well YGWC-36A are evaluated in the confidence interval comparisons to respective Groundwater Protection Standards. Throughout this report, well YGWC-24SA refers to the combined data from both wells YGWC-24S and YGWC-24SA and well YGWC-36A refers to data from both wells YGWC-36 and YGWC-36A.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed Kristina Rayner, Groundwater 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 and delineation well/constituent pairs with 100% non-detects follows this letter. Additionally, when Appendix IV constituents are not detected during a scheduled Scan event, no statistical analyses are required during the semi-annual sample event. During the annual Scan event conducted in February 2021, thallium was not detected; therefore, it was not required to be sampled during the subsequent event. In some cases, upgradient wells at a given unit were not sampled for all constituents if no detections were present at downgradient wells for that particular unit. The following constituents were not detected during their respective Scan events at other Plant Yates units; therefore, upgradient wells at the units listed below were not sampled for these constituents:

- Yates Gypsum Landfill: molybdenum
- Yates AP-1: cadmium, mercury, selenium, and thallium
- Yates AP-2: mercury and thallium

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters. The absence of samples from upgradient wells will affect the sample size of the combined background data set that is used for interwell limits among all units at Plant Yates; however, the calculated limits should be not be affected greatly.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data and this generally gives the most conservative limit in each case. In time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. For interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. Regarding the case of cobalt, due to varying detection limits in individual wells, the most recent reporting limit of 0.005 mg/L was substituted across all wells for all calculations and reports.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between

all wells. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Summary of Statistical Methods – Appendix III and IV Parameters:

Based on the April 2019 evaluation and state and federal regulatory requirements described below, the following methods were selected for Appendix III and IV constituents:

- Appendix III: Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Appendix IV: Confidence intervals on downgradient well data compared against Ground Water Protections Standards (GWPS) for each Appendix IV constituent

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 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 limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening Conducted in April 2019

Outlier and Trend Testing

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. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified. When the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

During the time of the screening, none of the outliers identified by Tukey's method were flagged in the database as all values were either similar to remaining measurements within the same well and neighboring wells, or the values were reported non-detects. Later, when all upgradient wells were pooled to construct statistical limits, one detected value of 6.3 s.u. for pH at well YGWA-47 (an upgradient well from AP-1) was flagged as an outlier because it was unusually high during a single event compared to all other values at neighboring wells. 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. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

When the reporting limit was higher than the CCR-rule specified levels discussed below, non-detects were substituted with one half the reporting limit.

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.

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 each well to identify statistically significant increasing or decreasing trends and the results of those findings were submitted with the screening. 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. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed several statistically significant decreasing and increasing trends for the Appendix III parameters. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short with only two years of record, making it difficult to separate trends from normal year-to-year variation; therefore, no adjustments were made to the data sets. If the observed decreasing or increasing trends persist over a longer time frame, some records may need to be truncated.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data

population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified variation among upgradient well data for all Appendix III parameters. These constituents were further evaluated during the screening for the appropriateness of intrawell or interwell methods for each constituent. However, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

Statistical Analysis of Appendix III Parameters – March 2021

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged for Appendix III parameters, and a summary of flagged outliers follows this report (Figure C).

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical pooled upgradient well data through March 2021 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether there are statistically significant increases (SSIs). Note that reporting limit changes during this analysis occurred for boron (from <0.1 mg/L to <0.04 mg/L), but there were no changes in statistical limits.

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When a resample confirms the initial exceedance, a statistically significant increase is identified and further research would be required to identify the cause of the exceedance (i.e. impact from the site, natural variation, or an off-site source). If the resample falls within the statistical limit, the initial exceedance is considered to be a false positive result and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter (Figure D). Prediction limit exceedances were noted for the following Appendix III well/constituent pairs:

- Boron: YGWC-23S, YGWC-38, YGWC-41, YGWC-42, and YGWC-43
- Calcium: YGWC-38 and YGWC-42
- Chloride: YGWC-24SA
- pH: YGWC-41

- Sulfate: YGWC-38, YGWC-42, and YGWC-43
- TDS: YGWC-38, YGWC-41, YGWC-42, and YGWC-43

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of natural variability in groundwater unrelated to practices at the site. Both a summary and complete graphical results of the trend tests follow this report. Statistically significant trends were identified for the following downgradient and associated upgradient well/constituent pairs:

Increasing:
- Boron: YGWC-43
- Calcium: YGWA-1D, GWA-2, YGWA-17S, and YGWA-21I (all upgradient)
- Chloride: YGWA-17S and YGWA-20S (both upgradient)
- pH: YGWA-21I (upgradient)
- Sulfate: YGWA-1D (upgradient), GWA-2 (upgradient), YGWA-3D (upgradient), YGWA-5I (upgradient), and YGWC-43
- TDS: YGWC-43

Decreasing:
- Boron: YGWA-21I (upgradient), YGWC-38, and YGWC-41
- Calcium: YGWA-1I (upgradient), YGWA-5D (upgradient), YGWA-18S (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-38, and YGWC-42
- Chloride: YGWA-3D, YGWA-3I, YGWA-5D, and YGWA-47 (all upgradient)
- pH: YGWA-5D, YGWA-18S, and YGWA-39 (all upgradient)
- Sulfate: YGWA-5D (upgradient), YGWA-39 (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-38, YGWC-41, and YGWC-42
- TDS: YGWA-5D (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-38, YGWC-41, and YGWC-42

Statistical Analysis of Appendix IV Parameters – March 2021

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection

Standards (GWPS). GWPS were developed as described below. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis.

A high value for cobalt at upgradient well GWA-2, 0.21 mg/L from March 2021, along with high values 0.20 mg/L and 0.16 mg/L from August and September 2020, were two orders of magnitude higher than the other values for that well. The August and September 2020 values were flagged during the previous analysis, and the March 2021 value was flagged as an outlier during this analysis in order to maintain limits that were conservative from a regulatory perspective. However, since three observations were reported at this level, further study may indicate that the values should not be flagged for future analyses. A summary of flagged outliers follows this report (Figure C).

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. When the alpha level (or false positive rate) for a nonparametric limit is shown as NaN in the results table, it indicates that the background sample size is large enough such that the resulting alpha level (or false positive rate) is too small to display in the results table. The background limits were then used when determining the Groundwater Protection Standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

As described in 40 CFR §257.95(h) (1-3), the Federal GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified levels have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)
- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the State GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements and the CCR Rule, Federal and State GWPS were established for Appendix IV constituents for the March 2021 sample event (Figure G). To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the detected Appendix IV constituents in each downgradient well using all historical data through March 2021 according to both Federal and State rules (Figures H and I, respectively). Delineation wells were included when a minimum of 4 samples were available. Note that while a GWPS is established for thallium, no statistical comparison with confidence intervals is required because this constituent was not sampled.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the CCR Rules for the federal requirements and the Georgia EPD Rules 391-3-4-.10(6)(a) for the State requirements. 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. Note that reporting limits decreased for the following constituents during this analysis:

- Beryllium from <0.003 mg/L to <0.0005 mg/L
- Cadmium from <0.0025 mg/L to <0.0005 mg/L
- Chromium from <0.01 mg/L to <0.005 mg/L
- Lead from <0.005 mg/L to <0.001 mg/L
- Mercury from <0.0005 mg/L to <0.0002 mg/L
- Selenium from <0.01 mg/L to <0.005 mg/L

As a result, background limits were lower for these constituents as compared to the previous analysis. However, in all cases for Federal and State confidence intervals, except for lead, which uses the background limit as the GWPS, the established MCL and/or CCR Rule Specified levels were higher than the background limits. Therefore, the GWPS were not affected. Summaries of confidence intervals and complete graphical results follow this letter. For both federal and state confidence intervals, exceedances were noted for the following well/constituent pairs:

Federal:
- Beryllium: YGWC-38
- Selenium: YGWC-38 and PZ-37

State:

- Beryllium: YGWC-38
- Selenium: YGWC-38 and PZ-37

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates Ash Management Area (AMA) and R6 CCR Landfill. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins
Project Manager

Kristina L. Rayner
Groundwater Statistician

100% Non-Detects: Appendix IV Downgradient and Delineation Wells

Analysis Run 5/6/2021 9:04 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Antimony (mg/L)
YAMW-2

Arsenic (mg/L)
YAMW-1, YAMW-2

Beryllium (mg/L)
YAMW-4

Cadmium (mg/L)
YAMW-2, YAMW-4, YGWC-43, YGWC-24SA

Chromium (mg/L)
YAMW-5

Cobalt (mg/L)
YGWC-23S, YGWC-38, YGWC-24SA

Fluoride (mg/L)
YAMW-1, YAMW-2, YAMW-5, PZ-35

Lithium (mg/L)
YAMW-2, YGWC-24SA

Mercury (mg/L)
YAMW-1, YAMW-2, YAMW-4, YAMW-5, PZ-35, YGWC-24SA, YGWC-36A

Molybdenum (mg/L)
YAMW-2, YAMW-5, YGWC-23S, YGWC-38, YGWC-41, YGWC-24SA

Selenium (mg/L)
YAMW-2, YGWC-43, PZ-35, YGWC-24SA

Thallium (mg/L)
YAMW-1, YAMW-2, YAMW-4, YAMW-5, YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43, PZ-35, PZ-37, YGWC-24SA, YGWC-36A

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	YGWC-23S	0.16	n/a	3/4/2021	1.2	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-38	0.16	n/a	3/4/2021	6.4	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-41	0.16	n/a	3/4/2021	4	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-42	0.16	n/a	3/4/2021	14.8	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-43	0.16	n/a	3/4/2021	3.6	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-38	37	n/a	3/4/2021	87	Yes	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-42	37	n/a	3/4/2021	90.7	Yes	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-24SA	7.9	n/a	3/3/2021	8.6	Yes	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	8.39	4.86	3/4/2021	4.69	Yes	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-38	160	n/a	3/4/2021	356	Yes	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-42	160	n/a	3/4/2021	537	Yes	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-43	160	n/a	3/4/2021	328	Yes	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-38	221.5	n/a	3/4/2021	600	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-41	221.5	n/a	3/4/2021	224	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-42	221.5	n/a	3/4/2021	501	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-43	221.5	n/a	3/4/2021	592	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**3/4/2021**	**1.2**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**3/4/2021**	**6.4**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**3/4/2021**	**4**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**3/4/2021**	**14.8**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**3/4/2021**	**3.6**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	3/4/2021	0.04ND	No	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-24SA	0.16	n/a	3/3/2021	0.04ND	No	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-36A	0.16	n/a	3/4/2021	0.0088J	No	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	3/4/2021	10.2	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**3/4/2021**	**87**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	3/4/2021	16.4	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**3/4/2021**	**90.7**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	3/4/2021	32.2	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	3/4/2021	13	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24SA	37	n/a	3/3/2021	2.4	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-36A	37	n/a	3/4/2021	5.6	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	7.9	n/a	3/4/2021	1.8	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-38	7.9	n/a	3/4/2021	3.9	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-41	7.9	n/a	3/4/2021	3.4	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-42	7.9	n/a	3/4/2021	2.7	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-43	7.9	n/a	3/4/2021	2.1	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-49	7.9	n/a	3/4/2021	4.1	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	**YGWC-24SA**	**7.9**	**n/a**	**3/3/2021**	**8.6**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	YGWC-36A	7.9	n/a	3/4/2021	6.6	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-23S	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.68	n/a	3/4/2021	0.063J	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24SA	0.68	n/a	3/3/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36A	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	8.39	4.86	3/4/2021	5.44	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	8.39	4.86	3/4/2021	5.01	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	**YGWC-41**	**8.39**	**4.86**	**3/4/2021**	**4.69**	**Yes**	**373**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009834**	**NP Inter (normality) 1 of 2**
pH (S.U.)	YGWC-42	8.39	4.86	3/4/2021	5.59	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	8.39	4.86	3/4/2021	5.88	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	8.39	4.86	3/4/2021	5.88	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24SA	8.39	4.86	3/3/2021	5.7	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-36A	8.39	4.86	3/4/2021	5.67	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-23S	160	n/a	3/4/2021	61.7	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**3/4/2021**	**356**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-41	160	n/a	3/4/2021	117	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**3/4/2021**	**537**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-43**	**160**	**n/a**	**3/4/2021**	**328**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-49	160	n/a	3/4/2021	75.1	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24SA	160	n/a	3/3/2021	0.5ND	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-36A	160	n/a	3/4/2021	6.3	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-23S	221.5	n/a	3/4/2021	96	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**221.5**	**n/a**	**3/4/2021**	**600**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**221.5**	**n/a**	**3/4/2021**	**224**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**221.5**	**n/a**	**3/4/2021**	**501**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-43**	**221.5**	**n/a**	**3/4/2021**	**592**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-49	221.5	n/a	3/4/2021	145	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24SA	221.5	n/a	3/3/2021	70	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-36A	221.5	n/a	3/4/2021	69	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-21I (bg)	-0.006801	-60	-58	Yes	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-38	-4.08	-56	-43	Yes	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-41	-2.779	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-43	0.7481	72	43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.118	59	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.0863	-67	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.232	68	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.9737	-45	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.574	-62	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-38	-30.07	-64	-43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-42	-11.87	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.036	-56	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.949	63	48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.7865	60	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1168	-63	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.3002	76	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.189	71	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.9116	-83	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-18S (bg)	-0.05702	-88	-81	Yes	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-21I (bg)	0.2015	107	81	Yes	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-39 (bg)	-0.2384	-89	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-5D (bg)	-0.09849	-78	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-38	-145.1	-67	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-42	-113.1	-49	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-43	54	56	43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-18.83	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-18.77	-74	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-198	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-41	-134.8	-62	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-42	-168.3	-56	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-43	111.1	70	43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-14.88	-54	-43	Yes	13	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	-0.0002497	-11	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-34	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003285	-14	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-15	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWA-21I (bg)**	**-0.006801**	**-60**	**-58**	**Yes**	**16**	**56.25**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-39 (bg)	0.002402	14	43	No	13	7.692	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.02279	-41	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-17	-58	No	16	62.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0001974	12	58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	-0.0019	-46	-58	No	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.1172	-38	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-38**	**-4.08**	**-56**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-41**	**-2.779**	**-44**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWC-42	-1.536	-37	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-43**	**0.7481**	**72**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-47 (bg)	-0.001291	-39	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	5	48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.00131	-37	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0	-2	-58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-23	-58	No	16	68.75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-18	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-28	-58	No	16	81.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-8	-58	No	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-23	-58	No	16	87.5	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.118**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.02122	10	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.0863**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.09145	54	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.232**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	0.4473	13	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-40 (bg)**	**-0.9737**	**-45**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-4I (bg)	0.2746	37	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-2.574**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-5I (bg)	0.09171	50	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-30.07**	**-64**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWC-42**	**-11.87**	**-44**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-47 (bg)**	**-2.036**	**-56**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GWA-2 (bg)**	**4.949**	**63**	**48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-14S (bg)	-0.03659	-46	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-1D (bg)**	**0.7865**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.1168**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0.5792	38	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0	-6	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.7746	48	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.43	27	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.3002**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.05099	35	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2082	50	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.189**	**71**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.1117	-28	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.2329	13	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.1751	26	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1099	36	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.9116**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	-1	-58	No	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.5003**	**-45**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GWA-2 (bg)	0.1272	29	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1626	30	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	-0.02735	-40	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	-0.02869	-33	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.05296	-45	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	-21	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.06529**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-3I (bg)**	**-0.05699**	**-66**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWC-24SA	0.4282	54	58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-17S (bg)	-0.005007	-36	-74	No	19	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-18I (bg)	-0.01164	-23	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-18S (bg)**	**-0.05702**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-20S (bg)	0.03	81	81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-21I (bg)**	**0.2015**	**107**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-39 (bg)**	**-0.2384**	**-89**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-40 (bg)	0.005552	4	58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-4I (bg)	-0.02017	-44	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-5D (bg)**	**-0.09849**	**-78**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-5I (bg)	0	-7	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWC-41	0.04117	13	53	No	15	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-47 (bg)	-0.0262	-37	-48	No	14	0	n/a	n/a	0.01	NP
pH (S.U.)	GWA-2 (bg)	-0.03439	-128	-139	No	29	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-14S (bg)	-0.003962	-13	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-1D (bg)	-0.06046	-60	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-1I (bg)	-0.05767	-78	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-2I (bg)	0.005696	10	81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-30I (bg)	0.002608	7	81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-3D (bg)	-0.006892	-11	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-3I (bg)	-0.03856	-36	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1322	51	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2007	-54	-58	No	16	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1939	-48	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	24	58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.2852	-25	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-3.687**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-12.05**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.1751	39	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-3.891**	**-96**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.09335**	**70**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-145.1**	**-67**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-42**	**-113.1**	**-49**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-43**	**54**	**56**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-25.19**	**-71**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**25.64**	**66**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-14S (bg)	0.09469	17	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.091**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.2947	-23	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.1728	11	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.08892	-28	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.4938**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-3I (bg)	0.6094	45	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	4.826	22	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-2.316	-19	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	3.74	25	58	No	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	3.156	31	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	15.05	46	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	17.14	28	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-40 (bg)**	**-18.83**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	1.119	8	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-5D (bg)**	**-18.77**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	-1.204	-7	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-38**	**-198**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-41**	**-134.8**	**-62**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-42**	**-168.3**	**-56**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-43**	**111.1**	**70**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWA-47 (bg)**	**-14.88**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GWA-2 (bg)	29.32	40	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	2.021	18	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	1.869	13	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-3.828	-26	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-3.302	-32	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	2.131	17	58	No	16	12.5	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	1.956	12	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	0.9644	5	58	No	16	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:57 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	315	n/a	n/a	86.03	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	363	n/a	n/a	77.96	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	363	n/a	n/a	3.03	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	81.27	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	95.68	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.0093	n/a	n/a	315	n/a	n/a	77.46	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	360	n/a	n/a	69.72	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	342	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	362	n/a	n/a	68.51	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.0013	n/a	n/a	317	n/a	n/a	82.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	342	n/a	n/a	27.49	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	278	n/a	n/a	93.17	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	306	n/a	n/a	59.8	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	345	n/a	n/a	91.59	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	298	n/a	n/a	96.64	n/a	n/a	NaN	NP Inter(NDs)

YATES AMA-R6 GWPS					
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**Federal GWPS**	**State GWPS**
Antimony, Total (mg/L)	0.006		0.0047	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01
Barium, Total (mg/L)	2		0.071	2	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Federal Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.025	0.00037	0.006	No	5	0.006874	0.0102	60	None	No	0.031	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	16	0.002541	0.0009916	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00061	0.006	No	13	0.002312	0.001105	69.23	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	13	0.002877	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	13	0.00281	0.0006851	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	13	0.002793	0.0007461	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	13	0.002664	0.0008287	84.62	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	5	0.002478	0.001167	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	11	0.002614	0.0008911	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	16	0.002869	0.000525	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	16	0.004256	0.006491	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	18	0.004789	0.0008957	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00212	0.0007623	0.01	No	14	0.001676	0.001497	14.29	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	14	0.00288	0.002208	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003139	0.00143	0.01	No	14	0.002355	0.001306	14.29	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	14	0.004086	0.001819	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	13	0.004035	0.001835	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	6	0.003608	0.002158	66.67	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	11	0.002504	0.001995	36.36	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	18	0.004806	0.000825	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	18	0.004041	0.001847	77.78	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.04981	0.02919	2	No	6	0.0395	0.007503	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04499	0.02913	2	No	18	0.03706	0.01311	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.0239	0.01832	2	No	14	0.02111	0.003941	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03029	0.0206	2	No	14	0.02544	0.00684	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04675	0.03191	2	No	14	0.03933	0.01047	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03572	0.01774	2	No	14	0.02673	0.01269	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07999	0.06987	2	No	13	0.07493	0.006807	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.063	0.032	2	No	6	0.04	0.01166	0	None	No	0.0155	NP (normality)
Barium (mg/L)	PZ-37	0.05778	0.04078	2	No	11	0.04928	0.0102	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	18	0.02053	0.003411	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04411	0.03184	2	No	18	0.03797	0.01014	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	6	0.0004047	0.0001776	66.67	None	No	0.0155	NP (NDs)
Beryllium (mg/L)	YAMW-5	0.0002156	0.00005244	0.004	No	4	0.000134	0.00003593	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	18	0.0002109	0.0001859	27.78	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.002	0.004	No	14	0.003	0.000862	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.000067	0.004	No	14	0.0003503	0.0002087	64.29	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.0003	0.004	No	14	0.0004286	0.000133	42.86	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	13	0.0001408	0.0001088	7.692	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004361	0.0002224	0.004	No	7	0.0003871	0.0001188	28.57	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003331	0.0002091	0.004	No	11	0.0003355	0.0001069	18.18	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	18	0.0001811	0.000149	16.67	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.0003195	0.0001904	0.004	No	18	0.0002549	0.0001067	5.556	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	6	0.0003233	0.000194	50	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	18	0.0004761	0.0001014	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002798	0.002139	0.005	No	14	0.00235	0.0006149	0	None	x^4	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	14	0.0002886	0.0001446	28.57	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.00017	0.005	No	14	0.0003764	0.0001667	42.86	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	13	0.0004669	0.0001193	92.31	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	6	0.0004433	0.0001388	83.33	None	No	0.0155	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006329	0.0002453	0.005	No	11	0.0004727	0.0002328	18.18	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	18	0.0002433	0.0001453	22.22	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.001163	0.0003768	0.1	No	4	0.00077	0.0001732	0	None	No	0.01	Param.
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	14	0.003296	0.002061	57.14	None	No	0.01	NP (NDs)

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	14	0.004368	0.001607	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	14	0.004671	0.001232	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	14	0.004095	0.001807	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	14	0.003755	0.002043	71.43	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	12	0.001958	0.0009839	8.333	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.0012	0.0006	0.1	No	4	0.0007775	0.0002852	0	None	No	0.0625	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	11	0.004055	0.001633	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	14	0.004153	0.001684	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	14	0.004034	0.001699	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02859	0.004268	0.035	No	7	0.01643	0.01106	28.57	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	14	0.003742	0.002072	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	14	0.0022	0.0008927	7.143	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	14	0.00325	0.001688	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	13	0.003654	0.002103	69.23	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	6	0.00515	0.0003674	83.33	None	No	0.0155	NP (NDs)
Cobalt (mg/L)	PZ-37	0.0129	0.004336	0.035	No	11	0.008618	0.005139	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	18	0.003761	0.002058	72.22	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.8723	0.2073	6.92	No	5	0.5398	0.1984	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8108	0.3587	6.92	No	18	0.5848	0.3736	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.326	0.5981	6.92	No	14	0.962	0.5138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.374	0.6299	6.92	No	14	1.032	0.5676	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.942	1.277	6.92	No	14	2.11	1.175	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	4.059	1.333	6.92	No	14	2.696	1.924	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.175	0.4779	6.92	No	13	0.8266	0.469	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	1.075	-0.04565	6.92	No	5	0.5146	0.3343	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.039	1.437	6.92	No	11	1.749	0.4126	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7865	0.4799	6.92	No	18	0.6332	0.2534	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.095	0.5456	6.92	No	18	0.8205	0.4544	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	19	0.09468	0.02023	84.21	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	15	0.1616	0.1178	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	15	0.1007	0.002582	86.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	15	0.08607	0.02601	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1159	0.05777	4	No	15	0.1069	0.05423	26.67	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.06	4	No	14	0.09929	0.02702	57.14	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	11	0.1773	0.1198	63.64	None	No	0.006	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	19	0.09637	0.01535	89.47	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	19	0.09242	0.03298	63.16	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.015	No	5	0.000838	0.0003622	80	None	No	0.031	NP (NDs)
Lead (mg/L)	YGWC-23S	0.001	0.00021	0.015	No	16	0.0008016	0.0003629	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.015	No	14	0.0008071	0.0003832	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.015	No	14	0.0007541	0.0004218	64.29	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.015	No	14	0.0007422	0.0004243	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.015	No	14	0.0008682	0.000335	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.015	No	13	0.0009276	0.000261	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.015	No	5	0.0006474	0.0004833	60	None	No	0.031	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.015	No	11	0.0006066	0.0004535	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.015	No	16	0.0009008	0.0002768	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.000658	0.0002358	0.015	No	16	0.0004956	0.0004239	12.5	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.0235	0.0006154	0.04	No	6	0.01255	0.008417	16.67	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.04	No	18	0.002994	0.003057	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008994	0.007591	0.04	No	14	0.008293	0.0009903	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0025	0.04	No	14	0.004314	0.003188	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.0478	0.02983	0.04	No	14	0.03881	0.01268	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01912	0.01164	0.04	No	14	0.01538	0.005279	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.04	No	13	0.003708	0.0002465	0	None	No	0.01	NP (normality)

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	PZ-35	0.015	0.001	0.04	No	6	0.005133	0.006226	16.67	None	No	0.0155	NP (normality)
Lithium (mg/L)	PZ-37	0.03042	0.02345	0.04	No	11	0.02679	0.004677	9.091	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006884	0.003471	0.04	No	18	0.005478	0.002992	5.556	None	x^(1/3)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	13	0.0001883	0.00003045	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	11	0.0001743	0.00005804	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.0002	0.002	No	11	0.0001862	0.00004583	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.0002	0.002	No	11	0.0001865	0.00004462	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	10	0.0001801	0.0000459	80	None	No	0.011	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004895	0.001572	0.1	No	4	0.004925	0.003462	25	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00094	0.1	No	14	0.00525	0.004314	42.86	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0011	0.1	No	14	0.005679	0.004493	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.1	No	12	0.009225	0.002685	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.1	No	4	0.007975	0.00405	75	None	No	0.0625	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0016	0.1	No	11	0.004818	0.004118	36.36	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.1	No	14	0.007071	0.003747	57.14	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.0025	0.0019	0.05	No	6	0.0024	0.0002449	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	YAMW-4	0.016	0.0018	0.05	No	4	0.0057	0.006875	50	None	No	0.0625	NP (normality)
Selenium (mg/L)	YAMW-5	0.08521	0.01079	0.05	No	4	0.048	0.01639	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.03964	0.02677	0.05	No	18	0.03321	0.01064	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06577	0.04363	0.05	No	14	0.0547	0.01563	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05735	0.04038	0.05	No	14	0.04886	0.01198	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00899	0.006583	0.05	No	13	0.007646	0.00198	7.692	None	x^2	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002744	0.001829	0.05	No	18	0.002433	0.0005931	33.33	Kaplan-Meier	No	0.01	Param.

State Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.025	0.00037	0.006	No	5	0.006874	0.0102	60	None	No	0.031	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	16	0.002541	0.0009916	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00061	0.006	No	13	0.002312	0.001105	69.23	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	13	0.002877	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	13	0.00281	0.0006851	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	13	0.002793	0.0007461	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	13	0.002664	0.0008287	84.62	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	5	0.002478	0.001167	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	11	0.002614	0.0008911	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	16	0.002869	0.000525	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	16	0.004256	0.006491	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	18	0.004789	0.0008957	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00212	0.0007623	0.01	No	14	0.001676	0.001497	14.29	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	14	0.00288	0.002208	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003139	0.00143	0.01	No	14	0.002355	0.001306	14.29	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	14	0.004086	0.001819	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	13	0.004035	0.001835	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	6	0.003608	0.002158	66.67	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	11	0.002504	0.001995	36.36	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	18	0.004806	0.000825	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	18	0.004041	0.001847	77.78	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.04981	0.02919	2	No	6	0.0395	0.007503	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04499	0.02913	2	No	18	0.03706	0.01311	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.0239	0.01832	2	No	14	0.02111	0.003941	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03029	0.0206	2	No	14	0.02544	0.00684	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04675	0.03191	2	No	14	0.03933	0.01047	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03572	0.01774	2	No	14	0.02673	0.01269	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07999	0.06987	2	No	13	0.07493	0.006807	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.063	0.032	2	No	6	0.04	0.01166	0	None	No	0.0155	NP (normality)
Barium (mg/L)	PZ-37	0.05778	0.04078	2	No	11	0.04928	0.0102	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	18	0.02053	0.003411	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04411	0.03184	2	No	18	0.03797	0.01014	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	6	0.0004047	0.0001776	66.67	None	No	0.0155	NP (NDs)
Beryllium (mg/L)	YAMW-5	0.0002156	0.00005244	0.004	No	4	0.000134	0.00003593	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	18	0.0002109	0.0001859	27.78	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.002	0.004	No	14	0.003	0.000862	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.000067	0.004	No	14	0.0003503	0.0002087	64.29	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.0003	0.004	No	14	0.0004286	0.000133	42.86	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	13	0.0001408	0.0001088	7.692	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004361	0.0002224	0.004	No	7	0.0003871	0.0001188	28.57	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003331	0.0002091	0.004	No	11	0.0003355	0.0001069	18.18	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	18	0.0001811	0.000149	16.67	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.0003195	0.0001904	0.004	No	18	0.0002549	0.0001067	5.556	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	6	0.0003233	0.000194	50	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	18	0.0004761	0.0001014	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002798	0.002139	0.005	No	14	0.00235	0.0006149	0	None	x^4	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	14	0.0002886	0.0001446	28.57	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.00017	0.005	No	14	0.0003764	0.0001667	42.86	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	13	0.0004669	0.0001193	92.31	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	6	0.0004433	0.0001388	83.33	None	No	0.0155	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006329	0.0002453	0.005	No	11	0.0004727	0.0002328	18.18	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	18	0.0002433	0.0001453	22.22	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.001163	0.0003768	0.1	No	4	0.00077	0.0001732	0	None	No	0.01	Param.
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	14	0.003296	0.002061	57.14	None	No	0.01	NP (NDs)

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	14	0.004368	0.001607	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	14	0.004671	0.001232	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	14	0.004095	0.001807	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	14	0.003755	0.002043	71.43	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	12	0.001958	0.0009839	8.333	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.0012	0.0006	0.1	No	4	0.0007775	0.0002852	0	None	No	0.0625	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	11	0.004055	0.001633	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	14	0.004153	0.001684	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	14	0.004034	0.001699	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02859	0.004268	0.035	No	7	0.01643	0.01106	28.57	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	14	0.003742	0.002072	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	14	0.0022	0.0008927	7.143	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	14	0.00325	0.001688	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	13	0.003654	0.002103	69.23	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	6	0.00515	0.0003674	83.33	None	No	0.0155	NP (NDs)
Cobalt (mg/L)	PZ-37	0.0129	0.004336	0.035	No	11	0.008618	0.005139	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	18	0.003761	0.002058	72.22	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.8723	0.2073	6.92	No	5	0.5398	0.1984	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8108	0.3587	6.92	No	18	0.5848	0.3736	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.326	0.5981	6.92	No	14	0.962	0.5138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.374	0.6299	6.92	No	14	1.032	0.5676	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.942	1.277	6.92	No	14	2.11	1.175	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	4.059	1.333	6.92	No	14	2.696	1.924	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.175	0.4779	6.92	No	13	0.8266	0.469	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	1.075	-0.04565	6.92	No	5	0.5146	0.3343	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.039	1.437	6.92	No	11	1.749	0.4126	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7865	0.4799	6.92	No	18	0.6332	0.2534	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.095	0.5456	6.92	No	18	0.8205	0.4544	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	19	0.09468	0.02023	84.21	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	15	0.1616	0.1178	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	15	0.1007	0.002582	86.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	15	0.08607	0.02601	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1159	0.05777	4	No	15	0.1069	0.05423	26.67	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.06	4	No	14	0.09929	0.02702	57.14	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	11	0.1773	0.1198	63.64	None	No	0.006	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	19	0.09637	0.01535	89.47	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	19	0.09242	0.03298	63.16	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.0013	No	5	0.000838	0.0003622	80	None	No	0.031	NP (NDs)
Lead (mg/L)	YGWC-23S	0.001	0.00021	0.0013	No	16	0.0008016	0.0003629	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.0013	No	14	0.0008071	0.0003832	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.0013	No	14	0.0007541	0.0004218	64.29	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.0013	No	14	0.0007422	0.0004243	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.0013	No	14	0.0008682	0.000335	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.0013	No	13	0.0009276	0.000261	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.0013	No	5	0.0006474	0.0004833	60	None	No	0.031	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.0013	No	11	0.0006066	0.0004535	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.0013	No	16	0.0009008	0.0002768	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.000658	0.0002358	0.0013	No	16	0.0004956	0.0004239	12.5	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.0235	0.0006154	0.03	No	6	0.01255	0.008417	16.67	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.03	No	18	0.002994	0.003057	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008994	0.007591	0.03	No	14	0.008293	0.0009903	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0025	0.03	No	14	0.004314	0.003188	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.0478	0.02983	0.03	No	14	0.03881	0.01268	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01912	0.01164	0.03	No	14	0.01538	0.005279	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.03	No	13	0.003708	0.0002465	0	None	No	0.01	NP (normality)

State Confidence Intervals - All Results

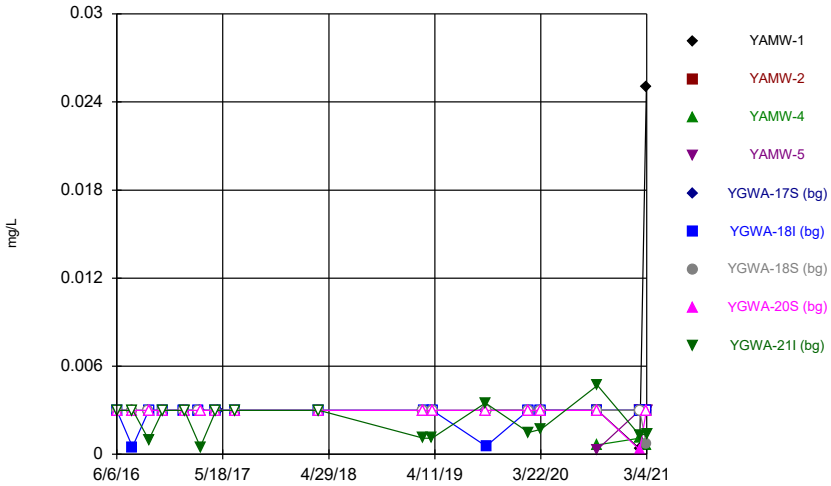
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	PZ-35	0.015	0.001	0.03	No	6	0.005133	0.006226	16.67	None	No	0.0155	NP (normality)
Lithium (mg/L)	PZ-37	0.03042	0.02345	0.03	No	11	0.02679	0.004677	9.091	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006884	0.003471	0.03	No	18	0.005478	0.002992	5.556	None	x^(1/3)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	13	0.0001883	0.00003045	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	11	0.0001743	0.00005804	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.0002	0.002	No	11	0.0001862	0.00004583	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.0002	0.002	No	11	0.0001865	0.00004462	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	10	0.0001801	0.0000459	80	None	No	0.011	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004895	0.001572	0.014	No	4	0.004925	0.003462	25	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00094	0.014	No	14	0.00525	0.004314	42.86	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0011	0.014	No	14	0.005679	0.004493	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.014	No	12	0.009225	0.002685	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.014	No	4	0.007975	0.00405	75	None	No	0.0625	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0016	0.014	No	11	0.004818	0.004118	36.36	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.014	No	14	0.007071	0.003747	57.14	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.0025	0.0019	0.05	No	6	0.0024	0.0002449	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	YAMW-4	0.016	0.0018	0.05	No	4	0.0057	0.006875	50	None	No	0.0625	NP (normality)
Selenium (mg/L)	YAMW-5	0.08521	0.01079	0.05	No	4	0.048	0.01639	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.03964	0.02677	0.05	No	18	0.03321	0.01064	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06577	0.04363	0.05	No	14	0.0547	0.01563	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05735	0.04038	0.05	No	14	0.04886	0.01198	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00899	0.006583	0.05	No	13	0.007646	0.00198	7.692	None	x^2	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002744	0.001829	0.05	No	18	0.002433	0.0005931	33.33	Kaplan-Meier	No	0.01	Param.

FIGURE A.

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
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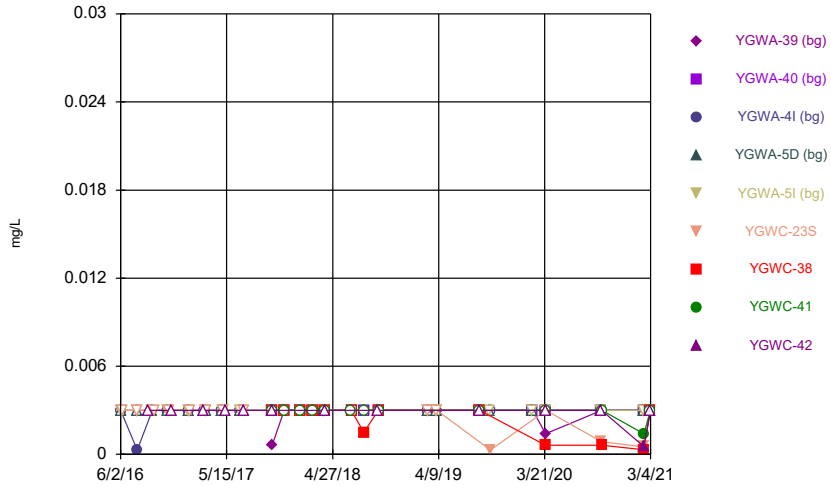

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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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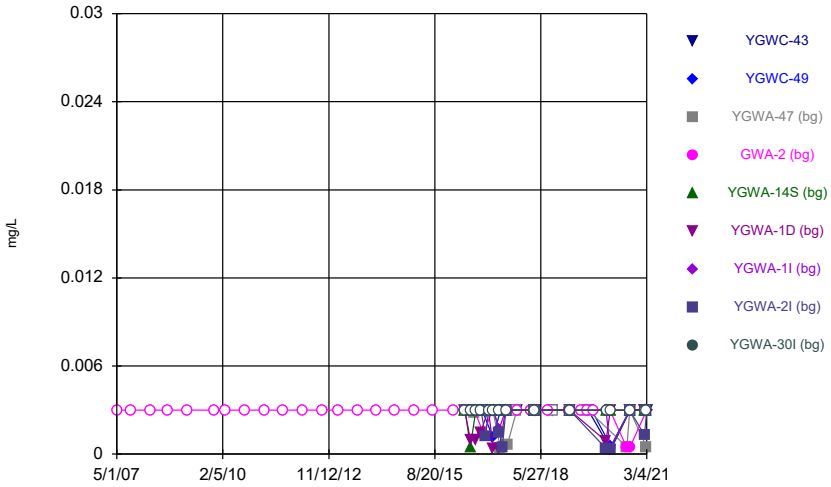

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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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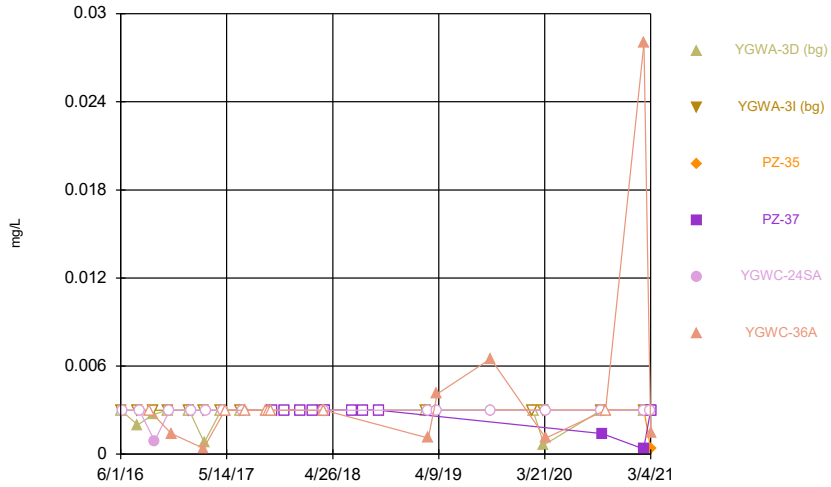

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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
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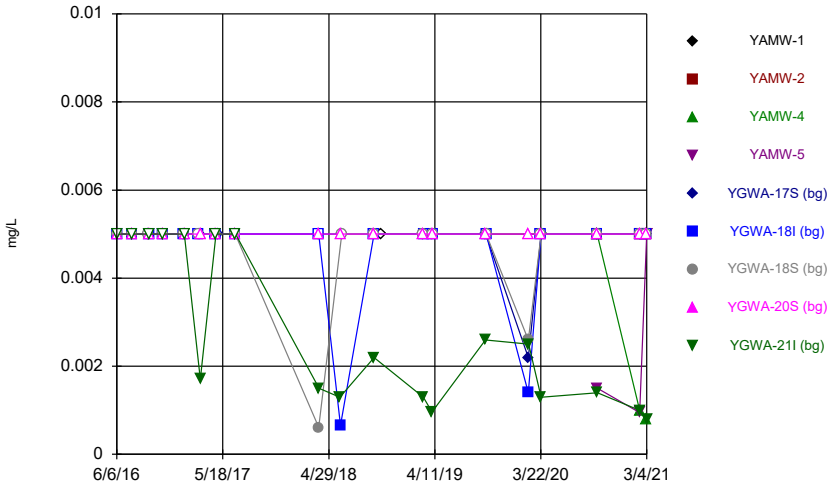

Constituent: Arsenic Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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Hollow symbols indicate censored values.

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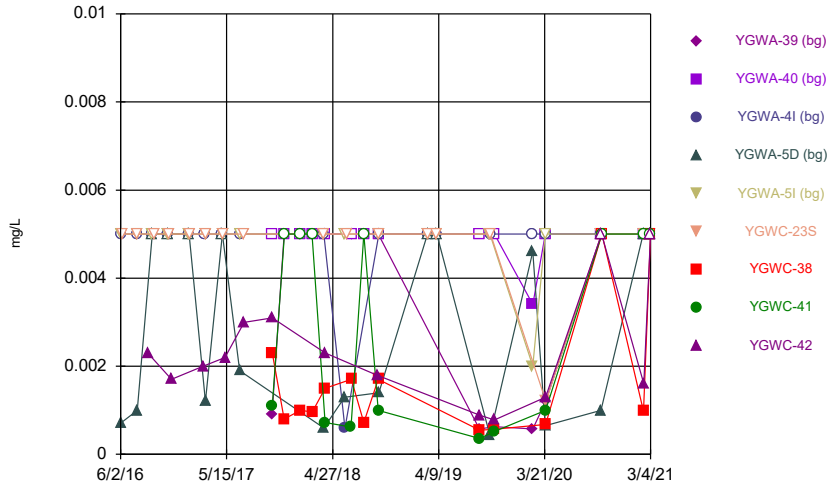

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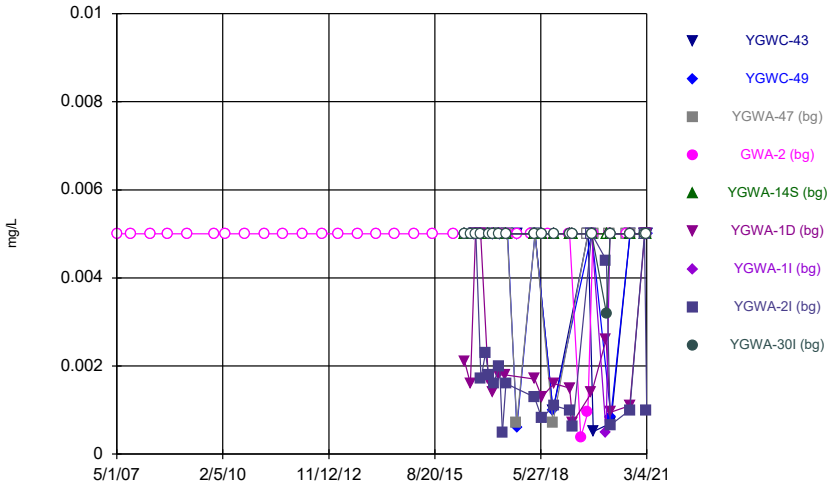

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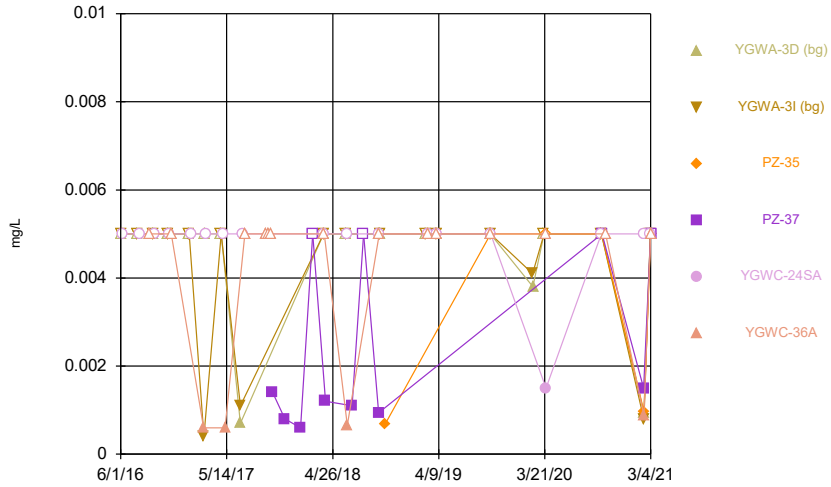

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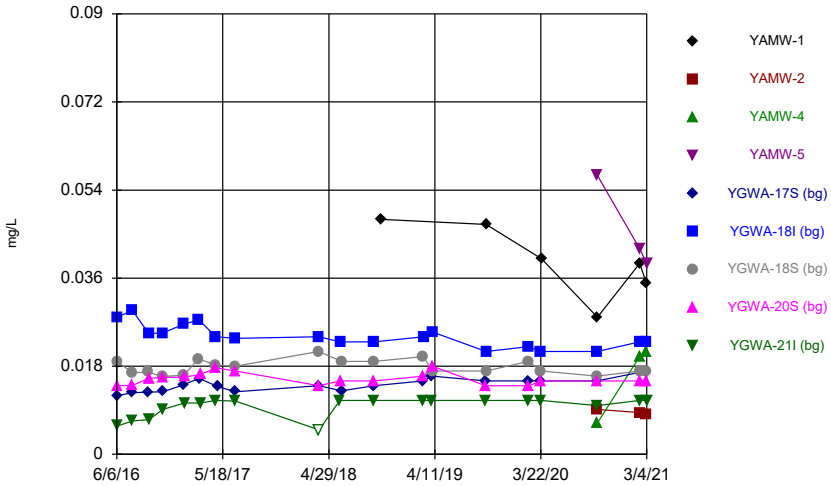

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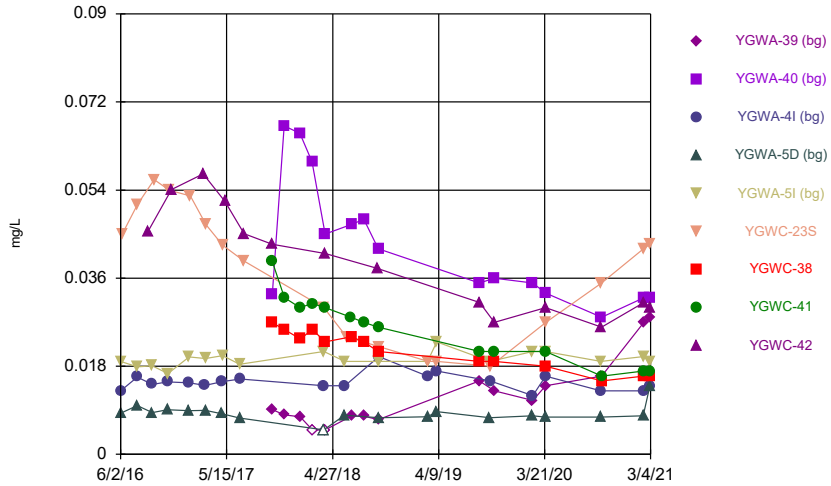

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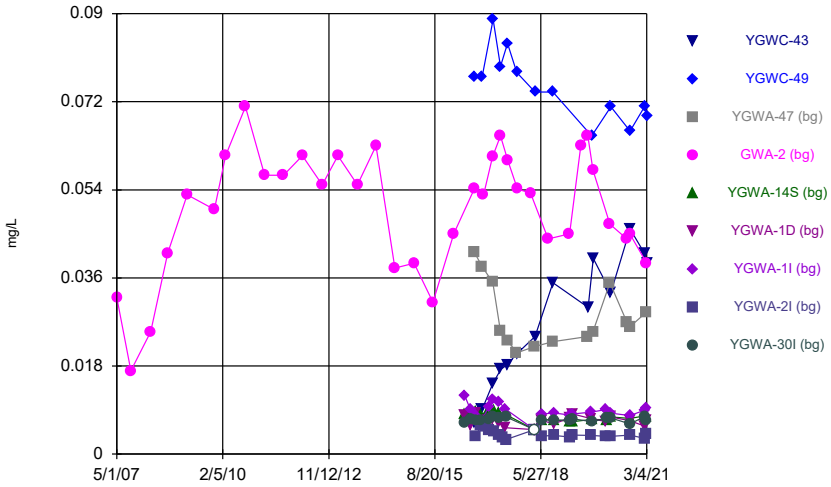

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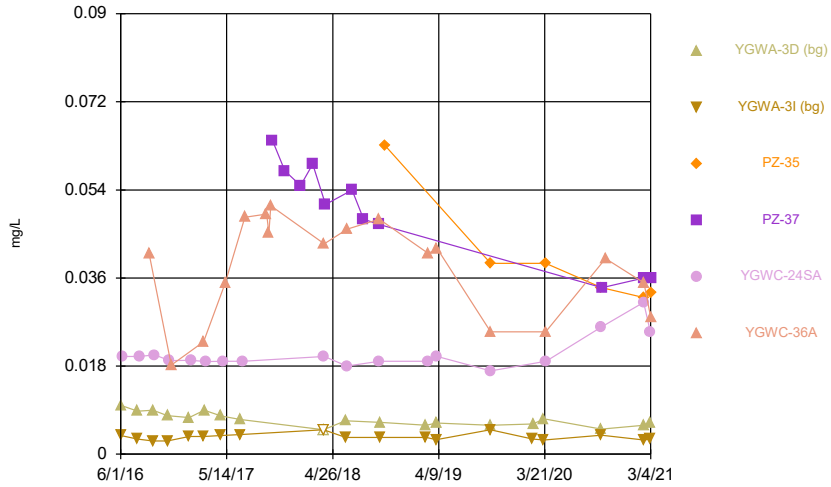

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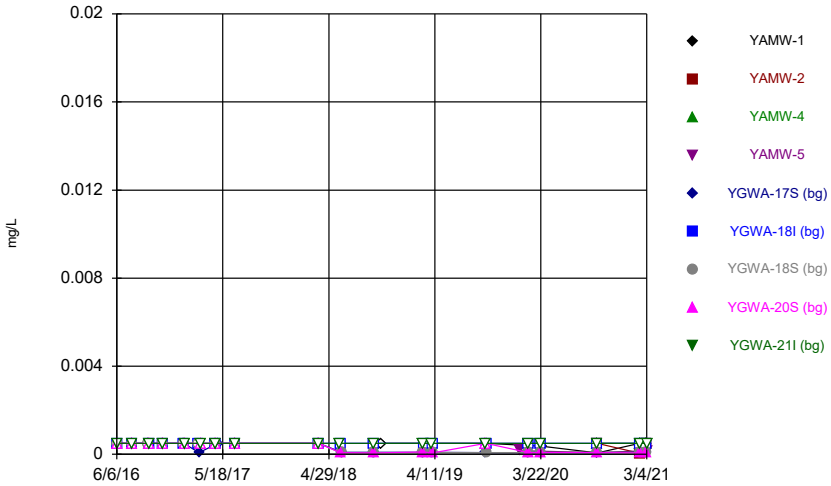
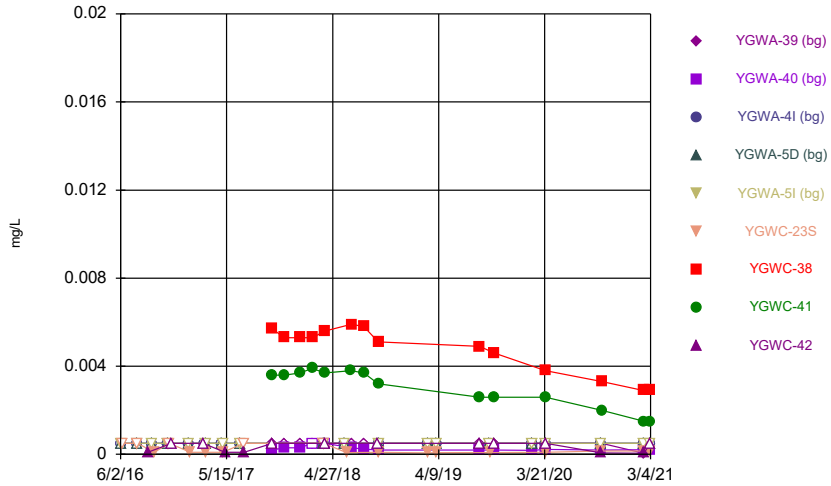


Constituent: Beryllium Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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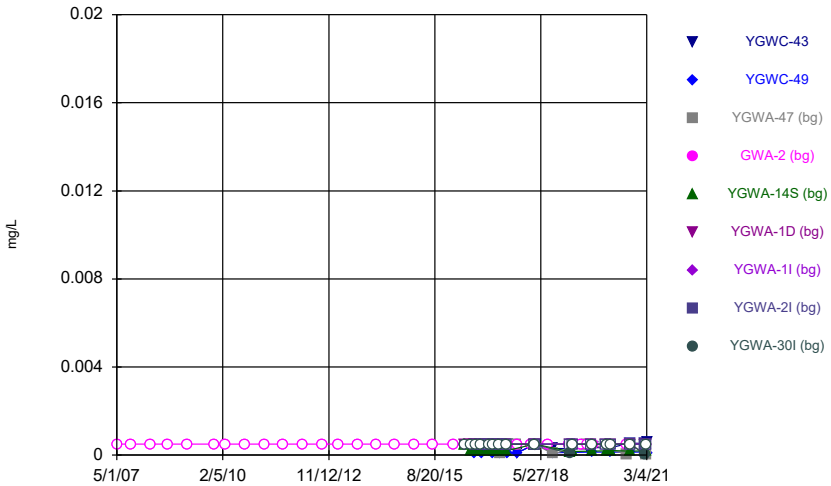

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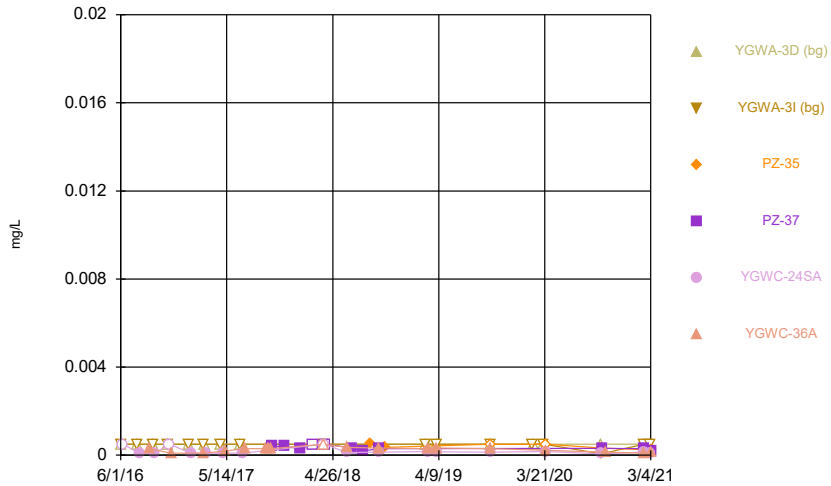

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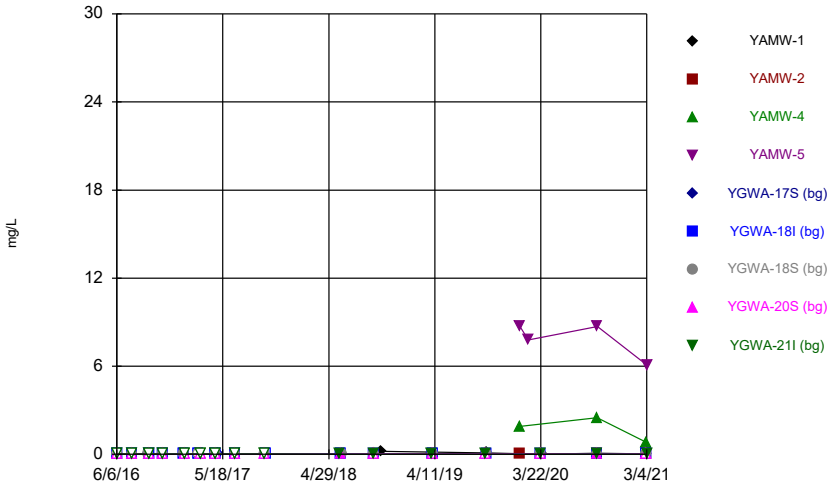
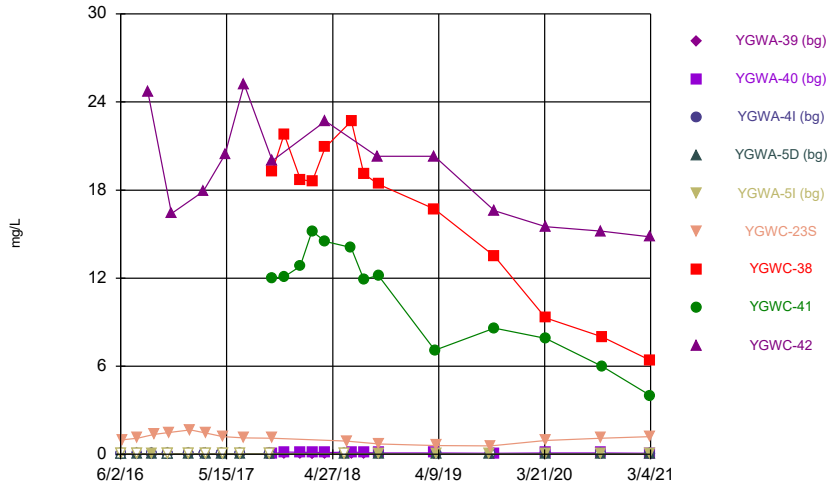


Constituent: Boron Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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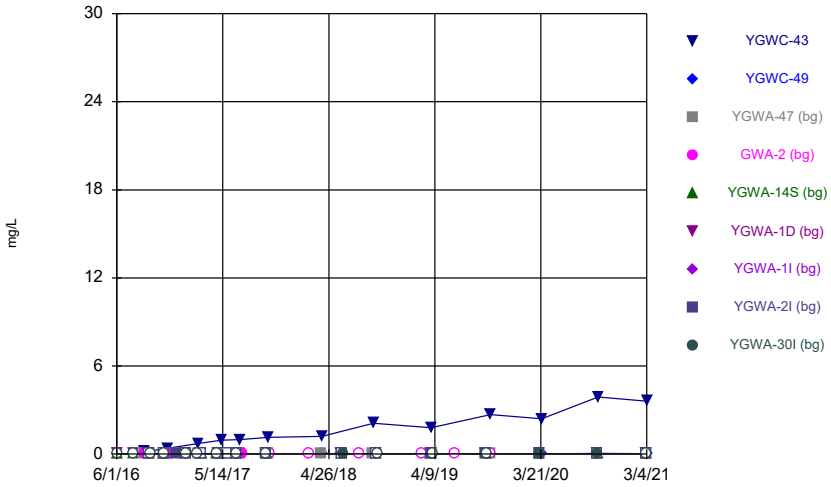
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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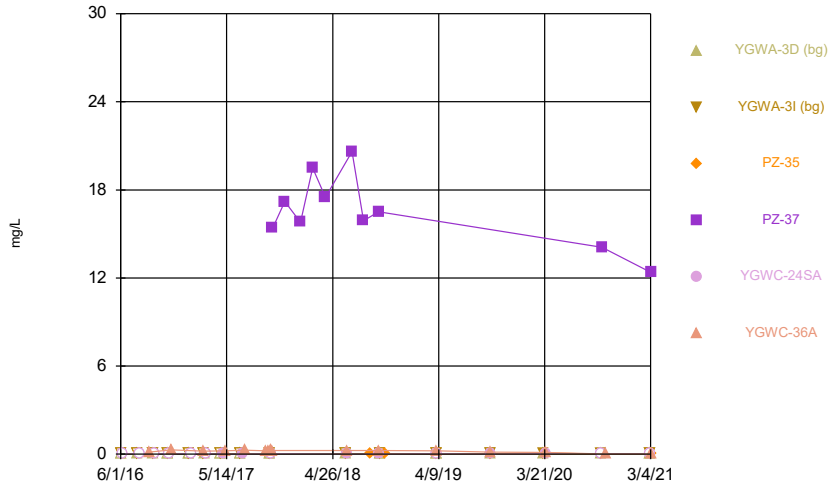
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

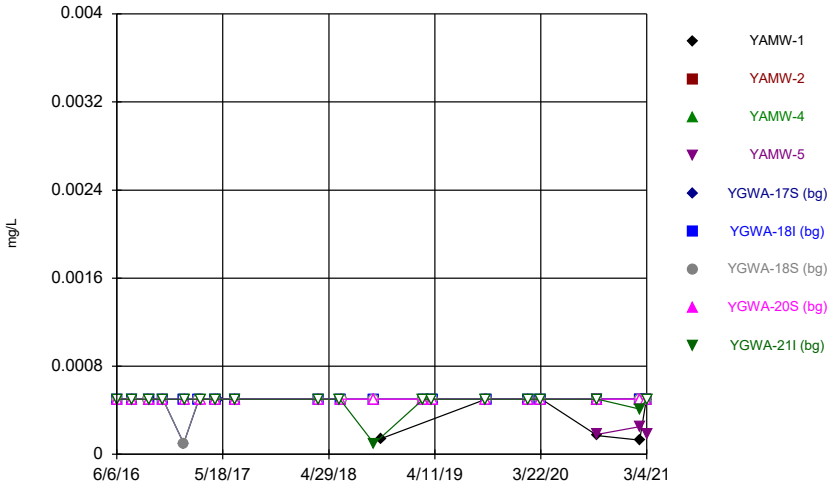
Time Series



Constituent: Boron Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

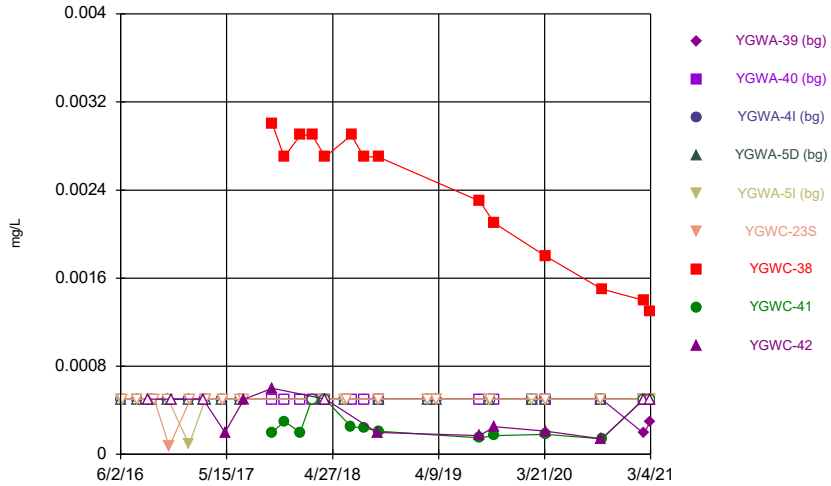
Time Series



Constituent: Cadmium Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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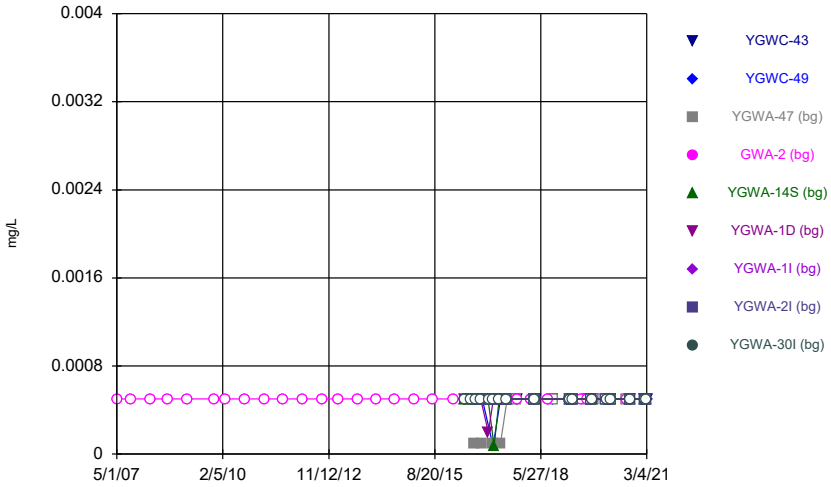
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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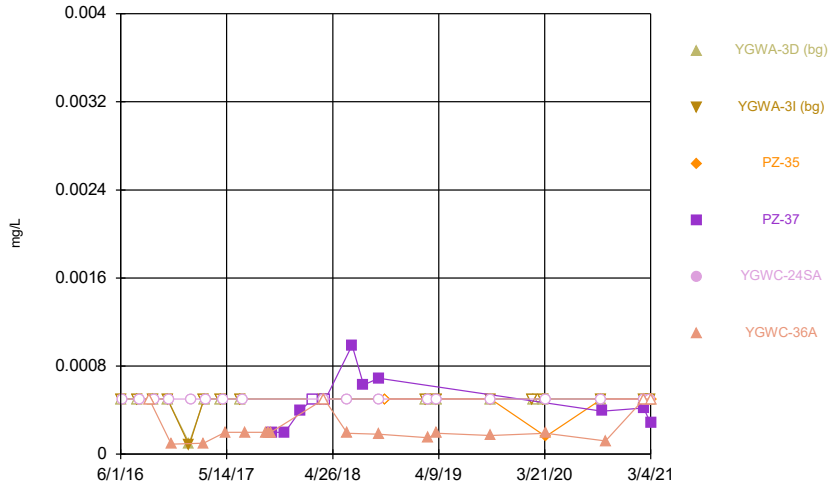
Hollow symbols indicate censored values.

Time Series



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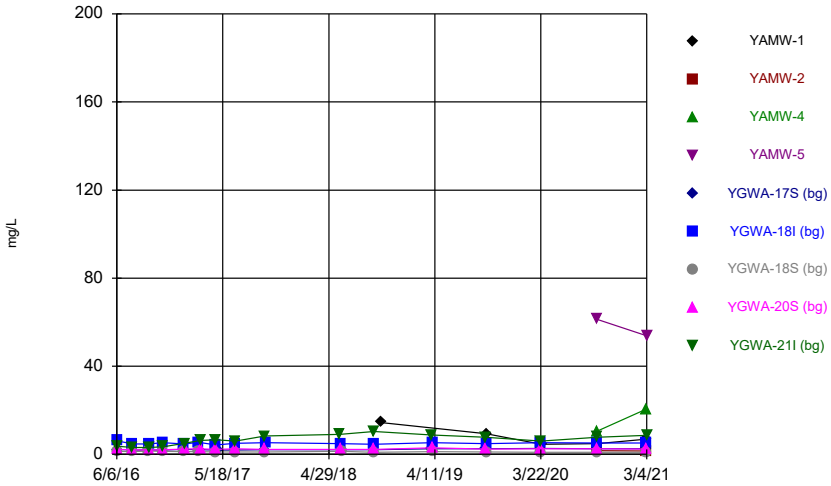
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



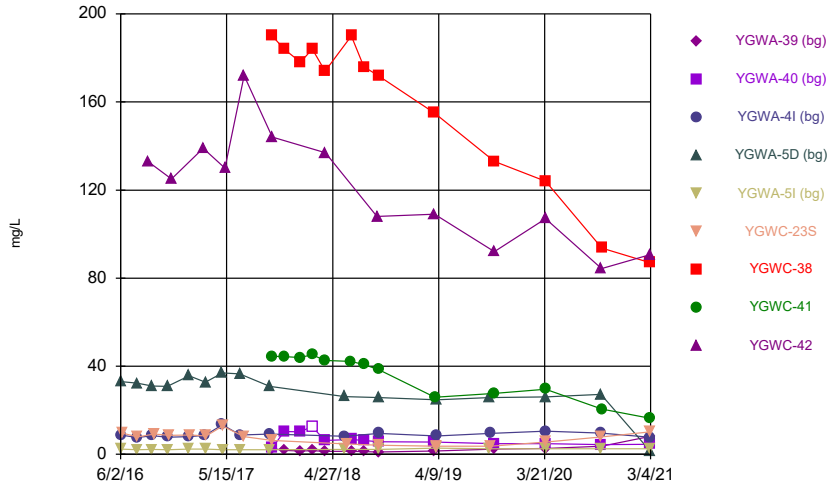
Constituent: Calcium Analysis Run 5/6/2021 8:33 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



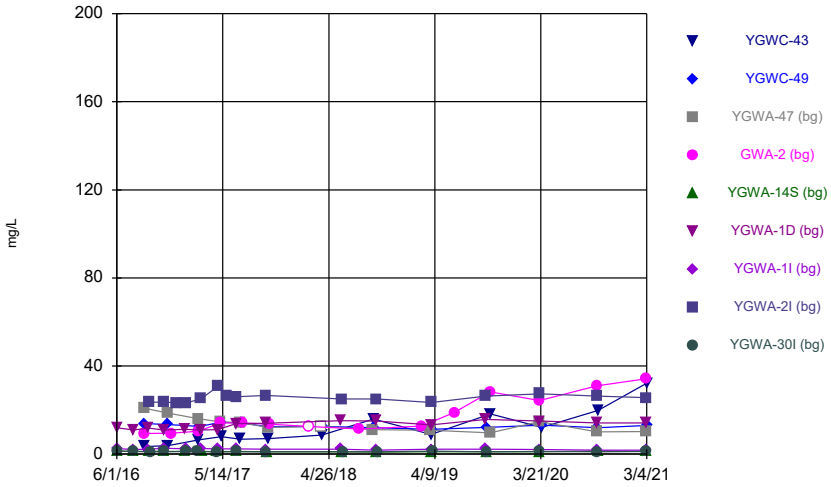
Constituent: Calcium Analysis Run 5/6/2021 8:33 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



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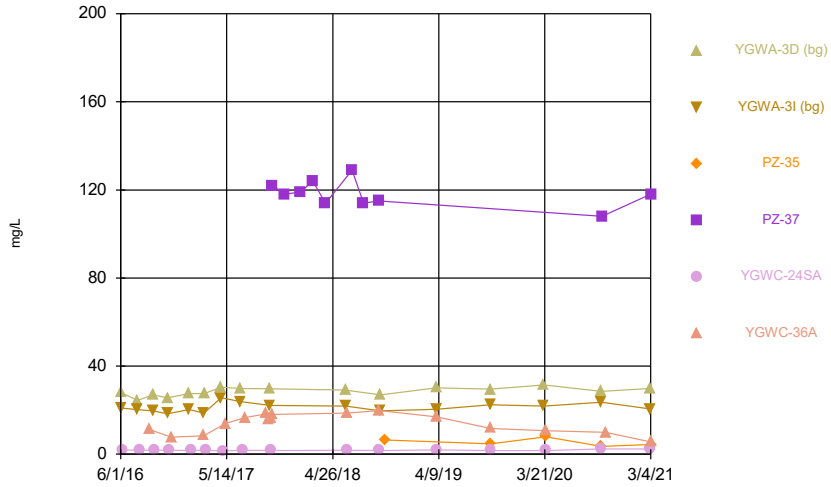
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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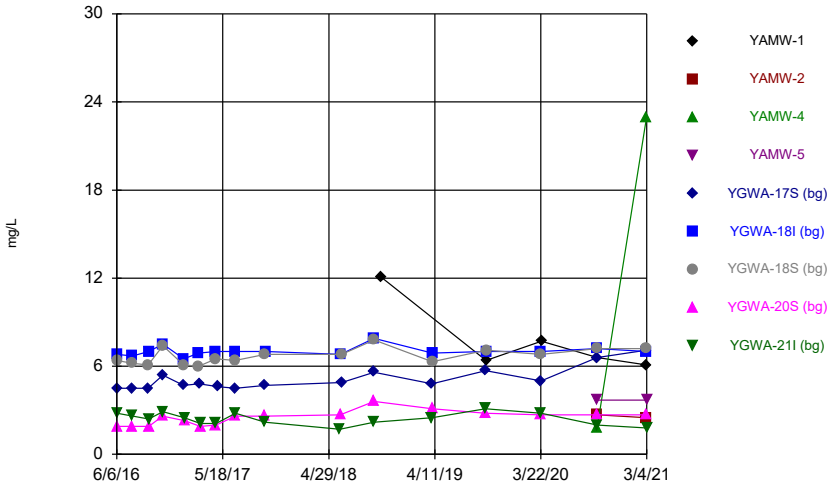
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

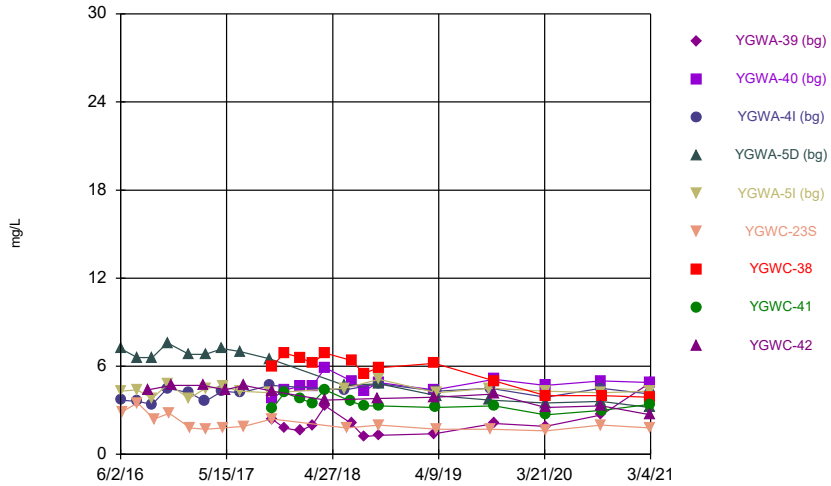
Time Series



Constituent: Chloride Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

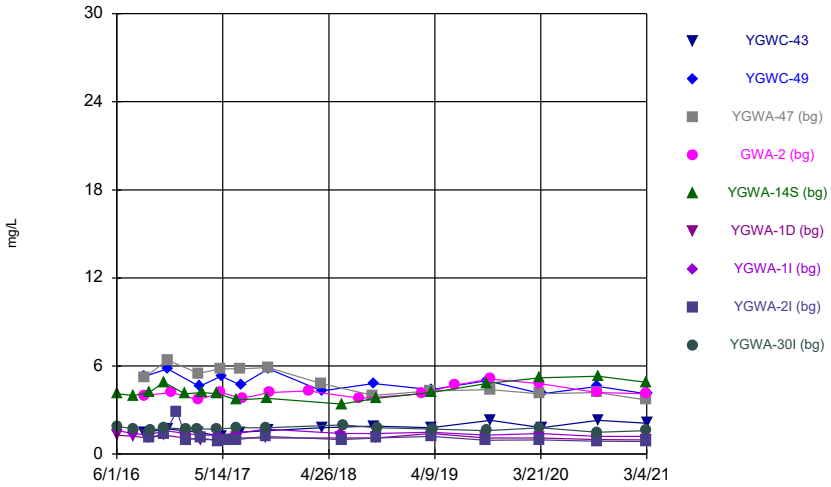
Time Series



Constituent: Chloride Analysis Run 5/6/2021 8:33 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



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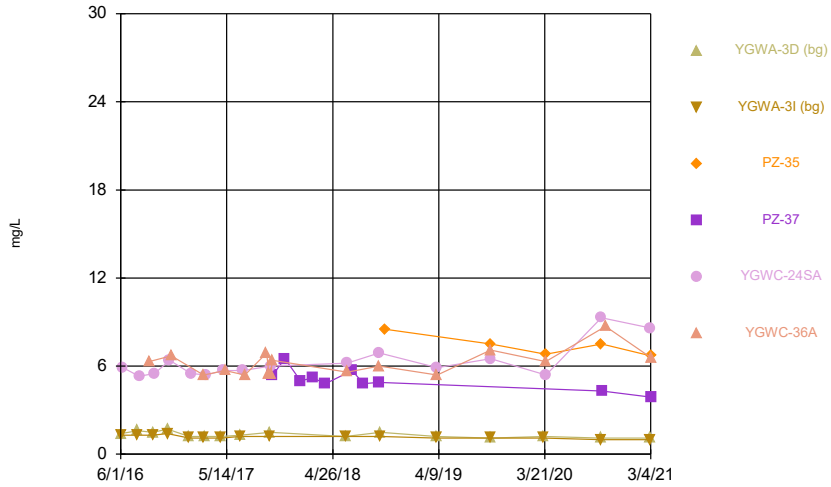
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

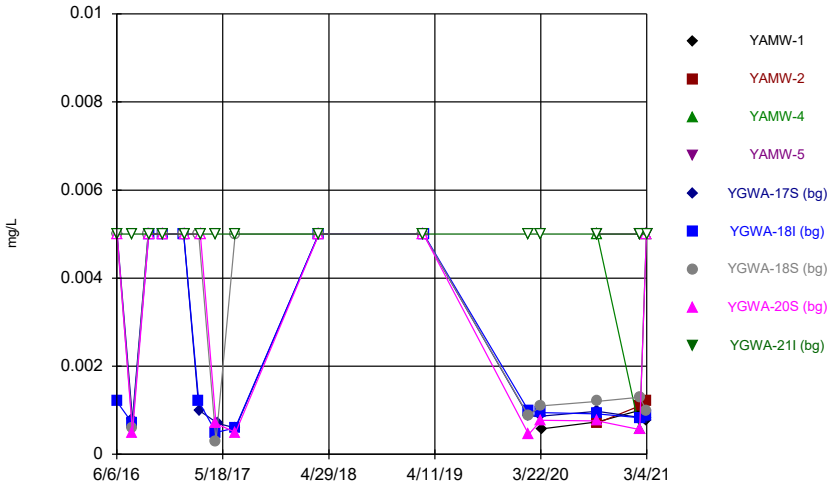
Time Series



Constituent: Chloride Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

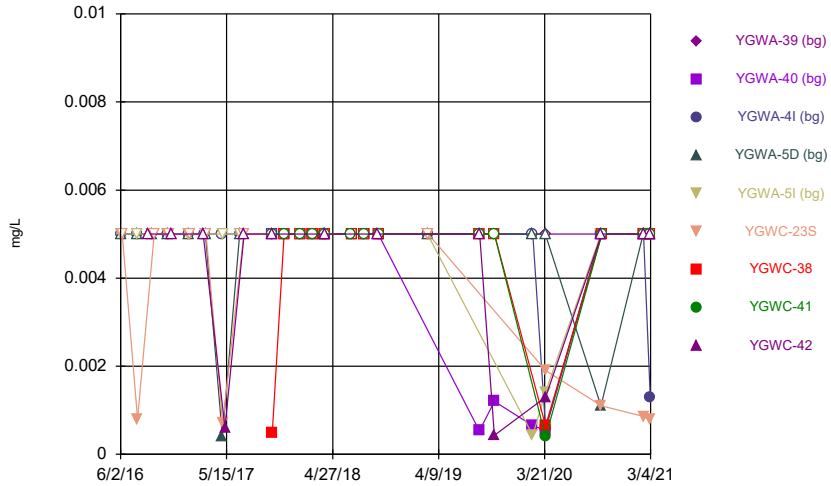
Time Series



Constituent: Chromium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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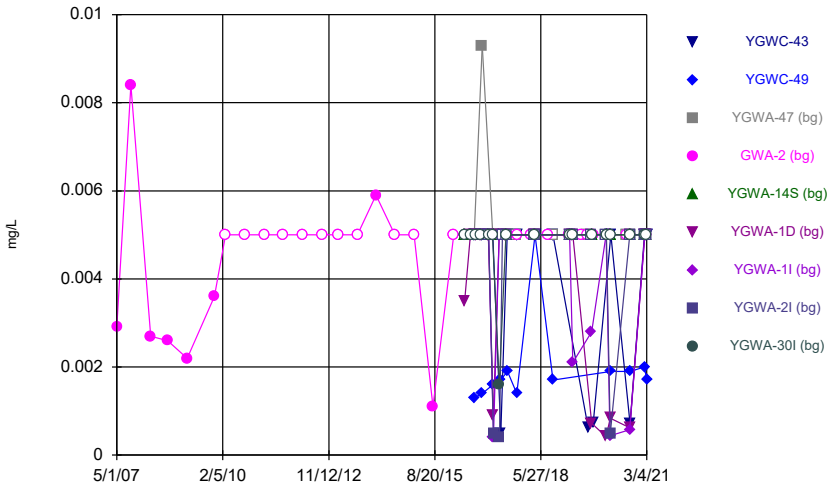
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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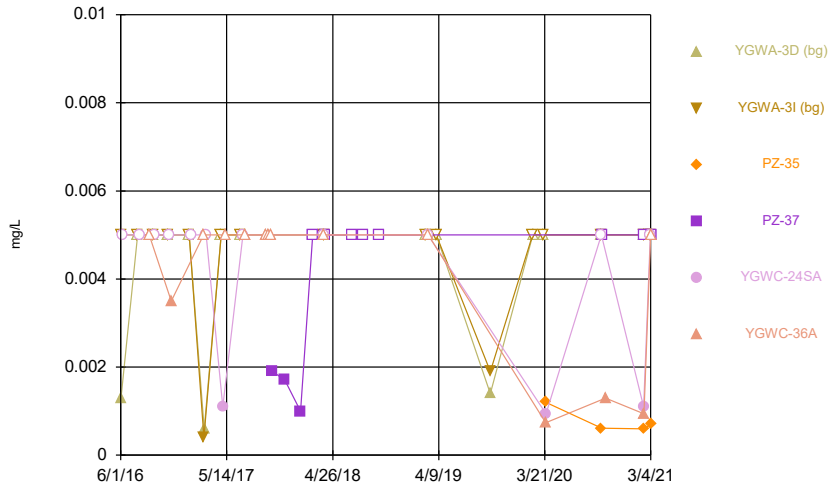
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

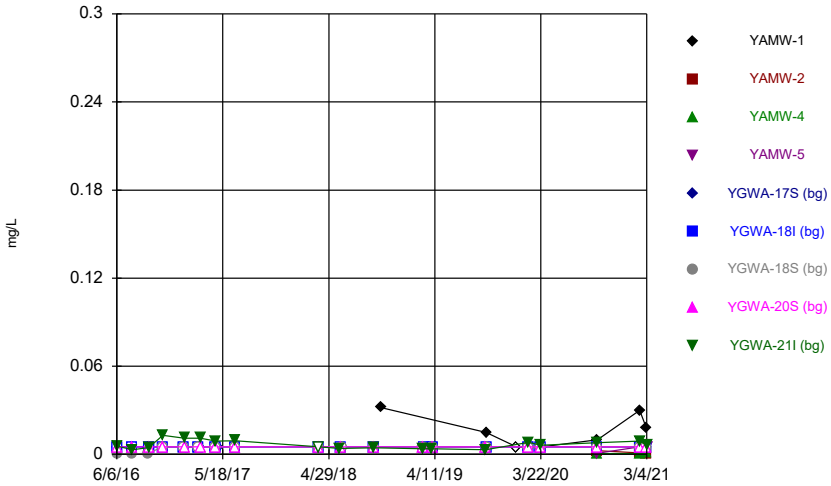
Time Series



Constituent: Chromium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

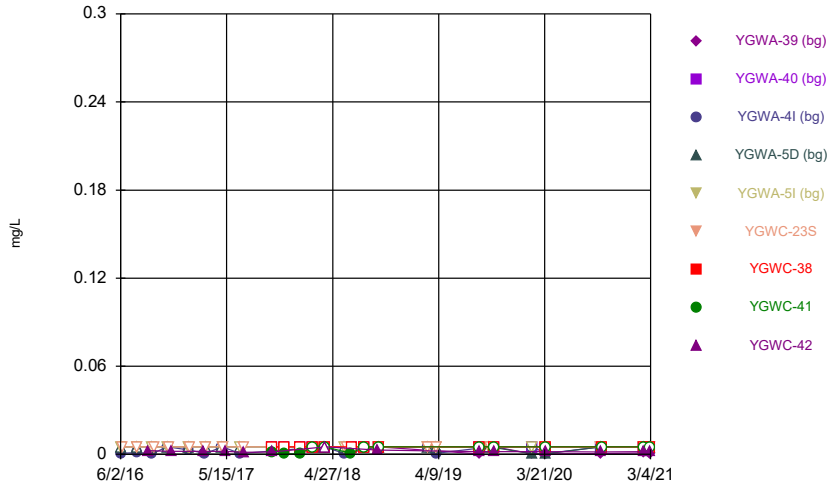
Time Series



Constituent: Cobalt Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

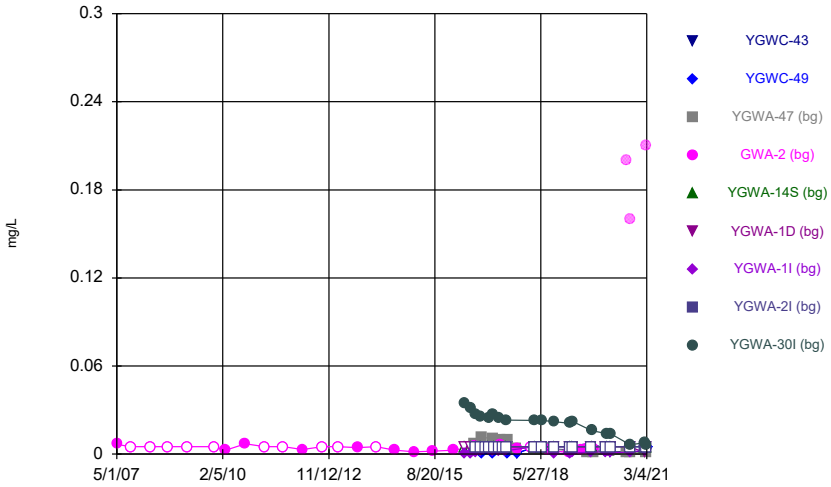
Time Series



Constituent: Cobalt Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

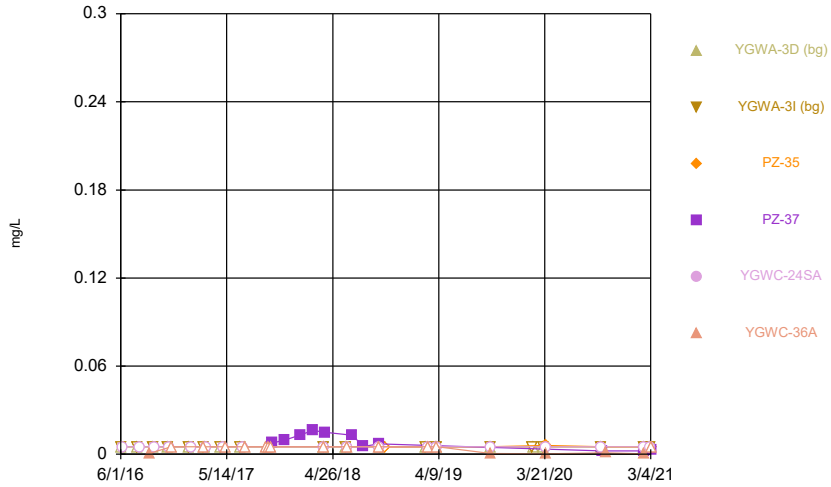
Time Series



Constituent: Cobalt Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

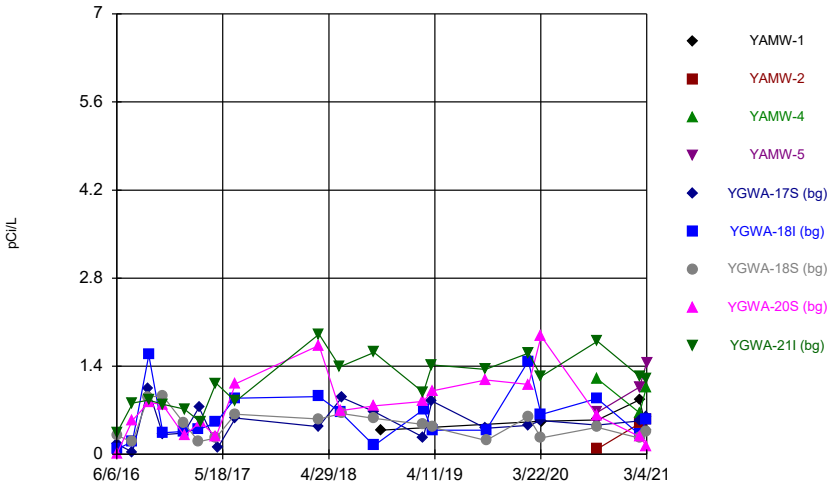
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

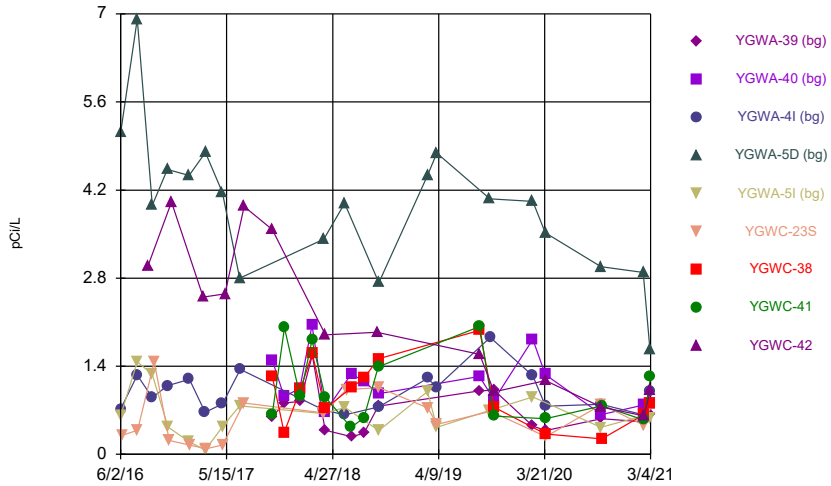
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

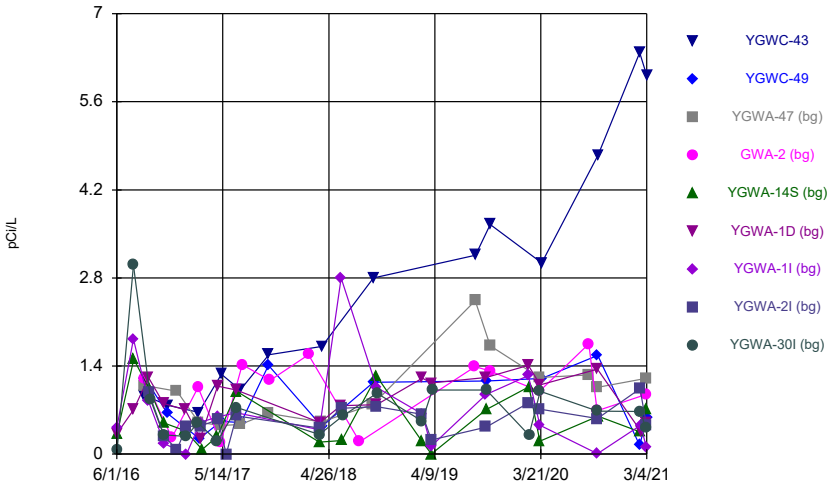
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

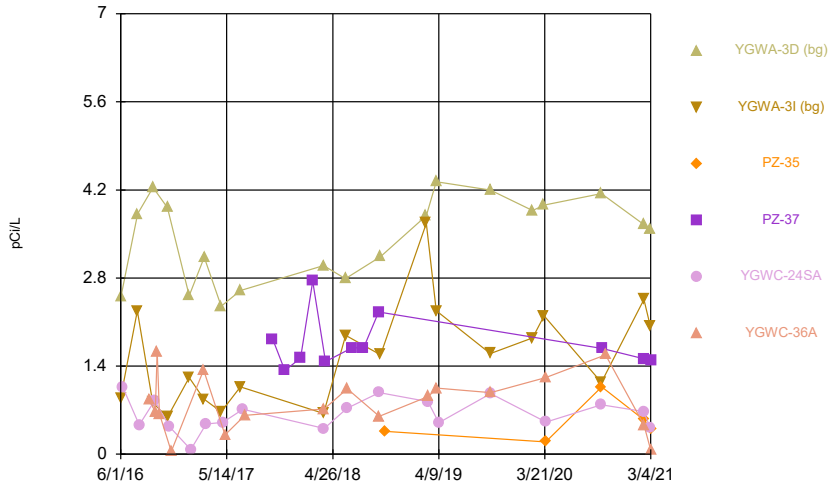
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

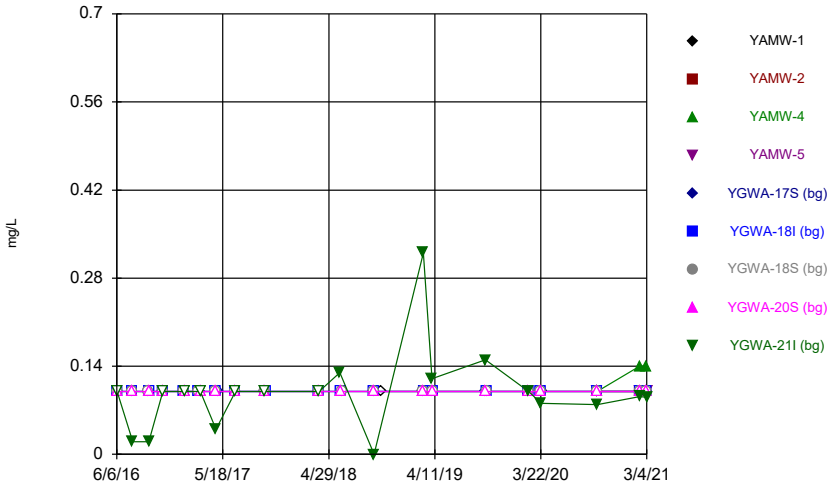
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

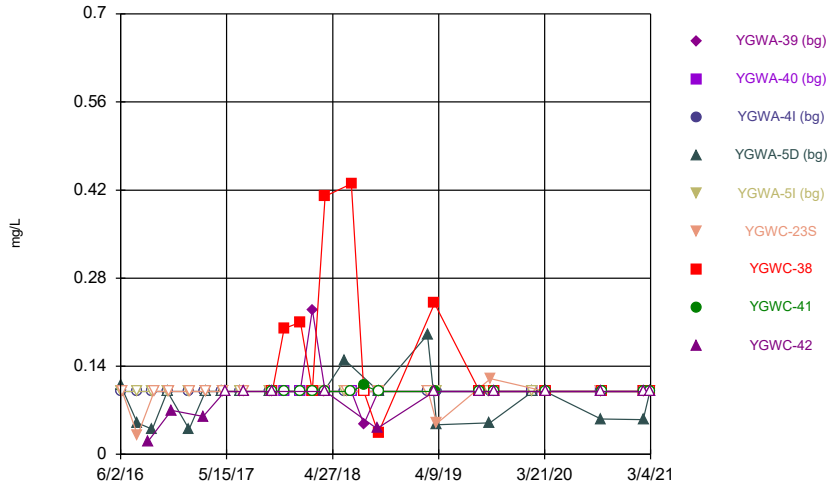
Time Series



Constituent: Fluoride Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

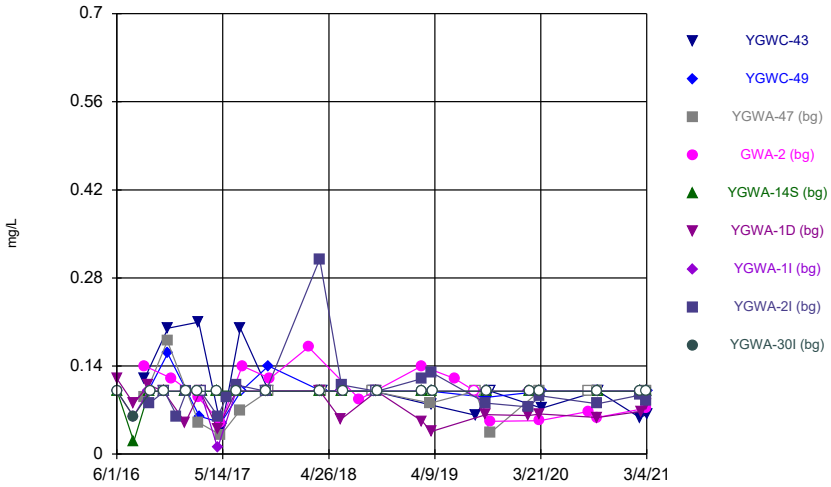
Time Series



Constituent: Fluoride Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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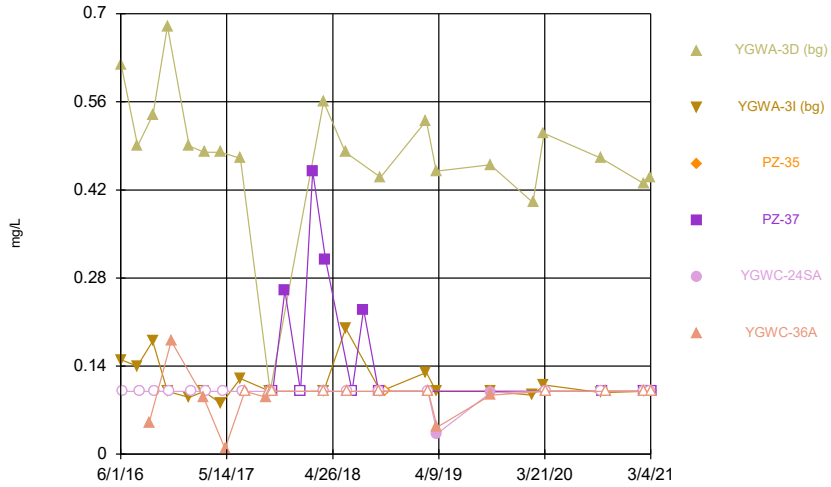
Hollow symbols indicate censored values.

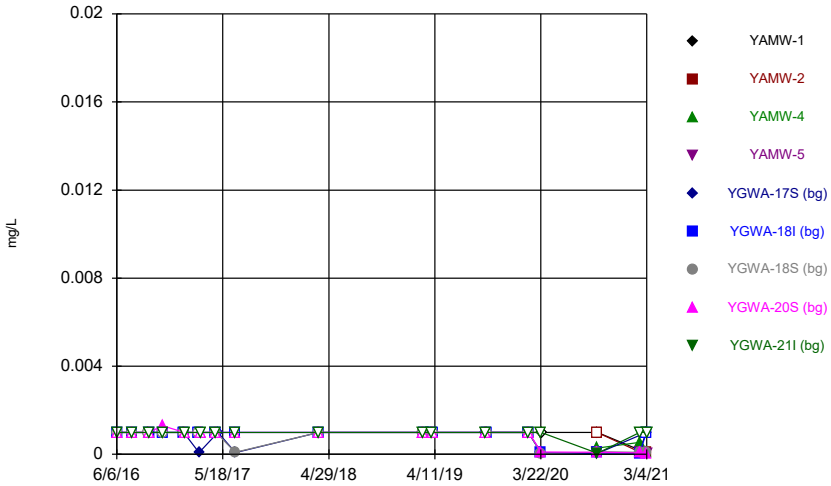
Time Series



Constituent: Fluoride Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

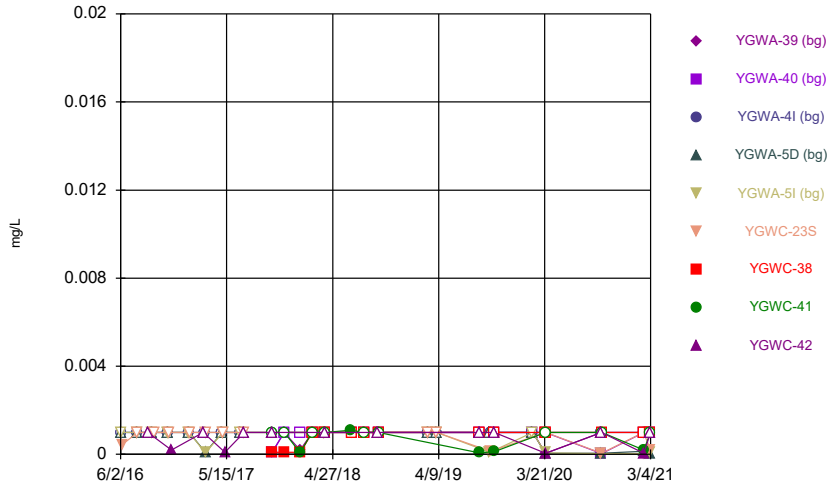
Time Series



Constituent: Lead Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lead Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
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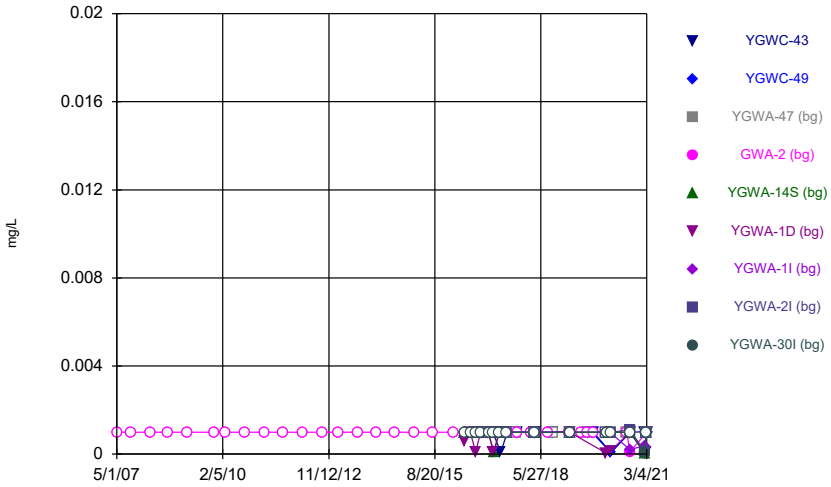
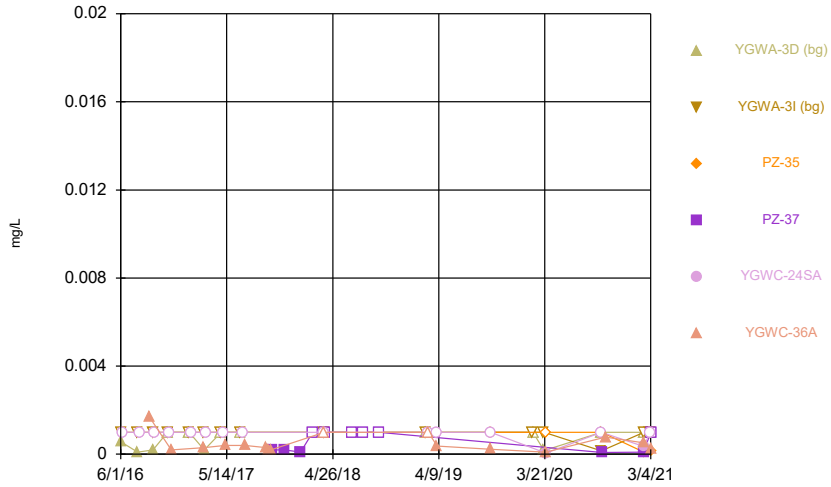
Time Series



Constituent: Lead Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

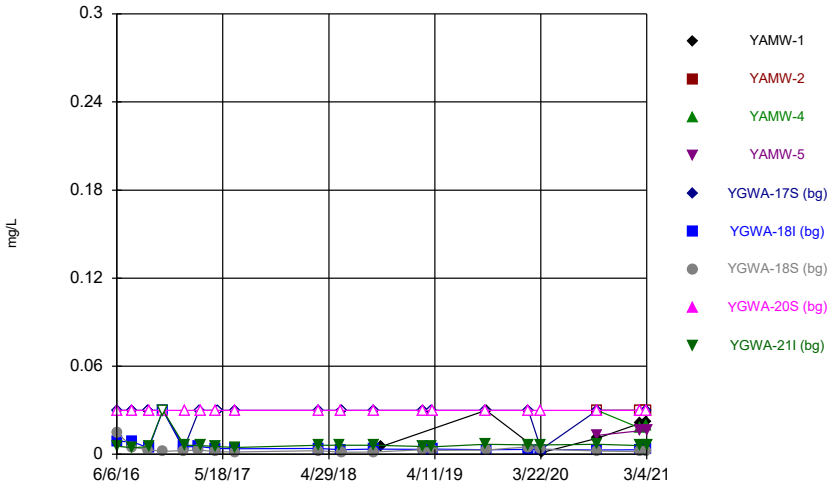
Time Series



Constituent: Lead Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

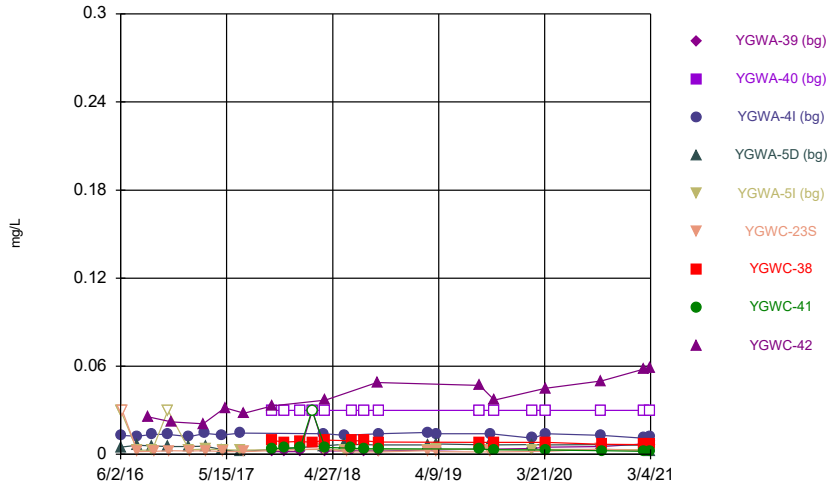
Time Series



Constituent: Lithium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Lithium Analysis Run 5/6/2021 8:34 PM
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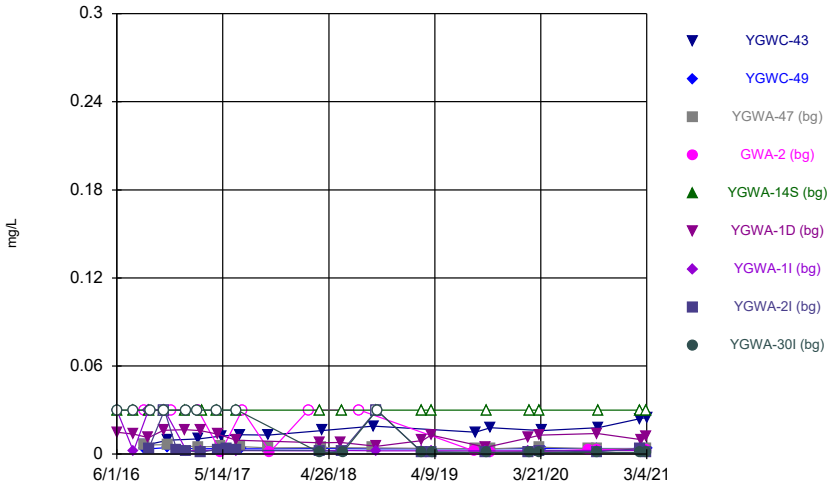
Time Series



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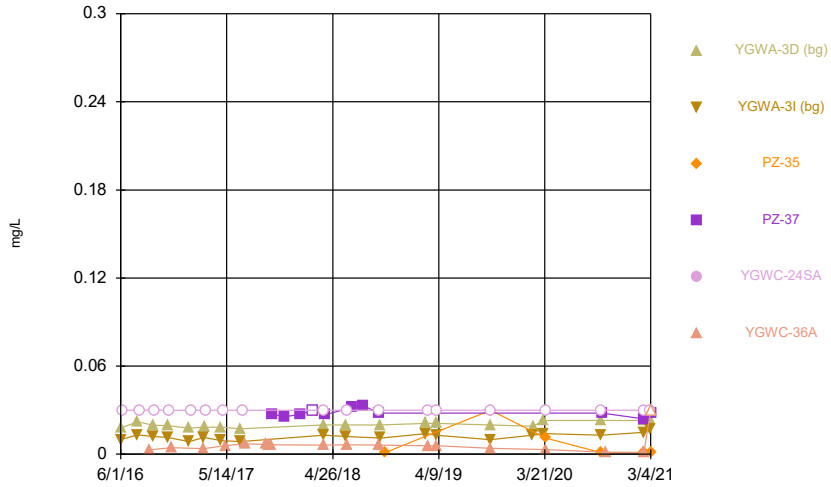
Time Series



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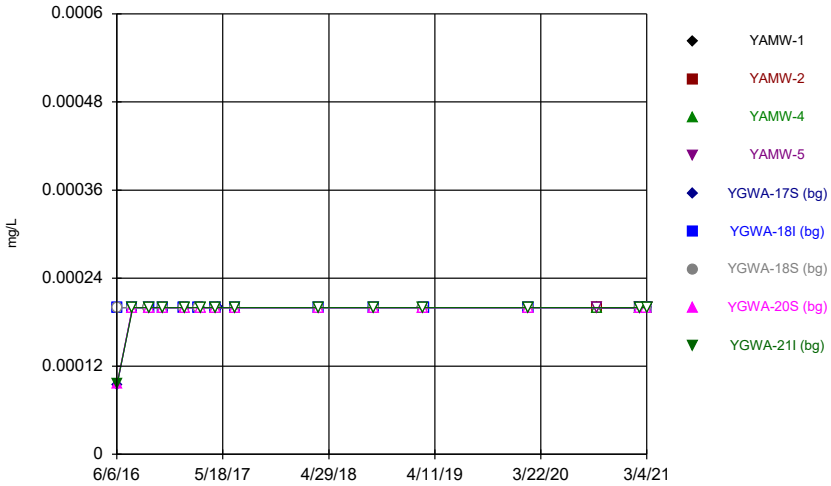
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

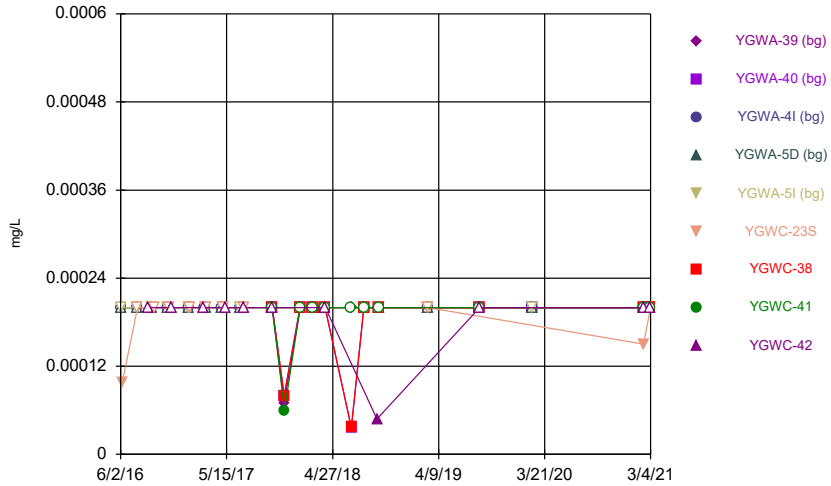
Time Series



Constituent: Mercury Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

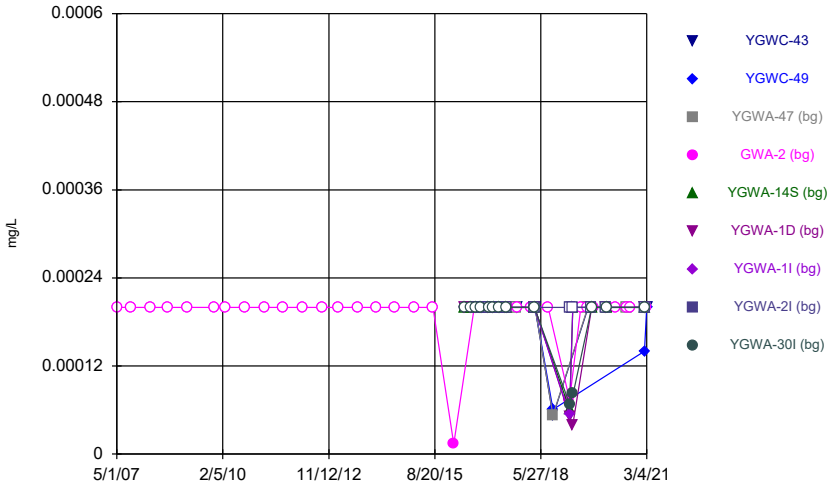
Time Series



Constituent: Mercury Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

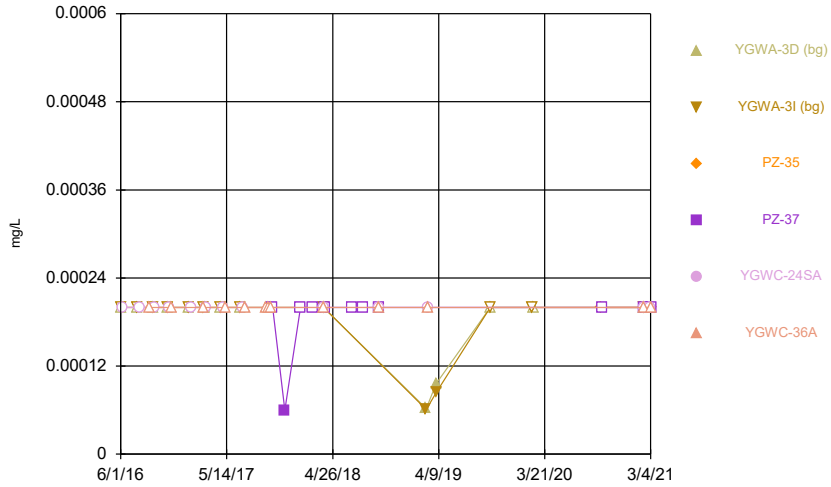
Time Series



Constituent: Mercury Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

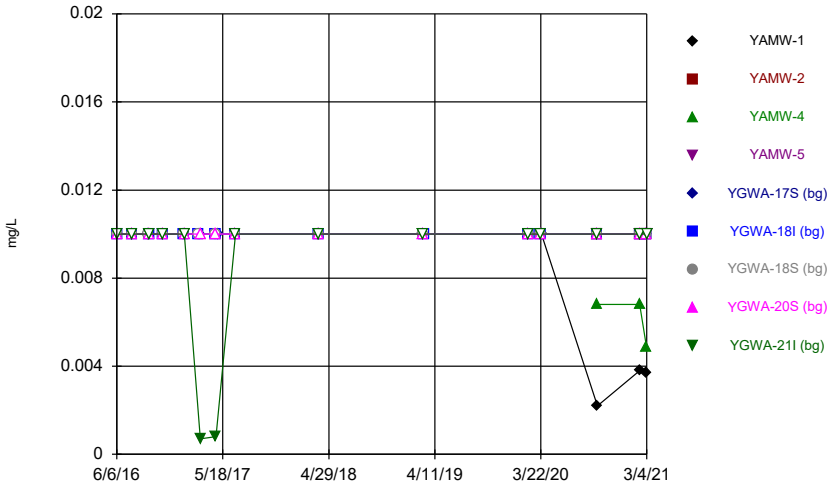
Time Series



Constituent: Mercury Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

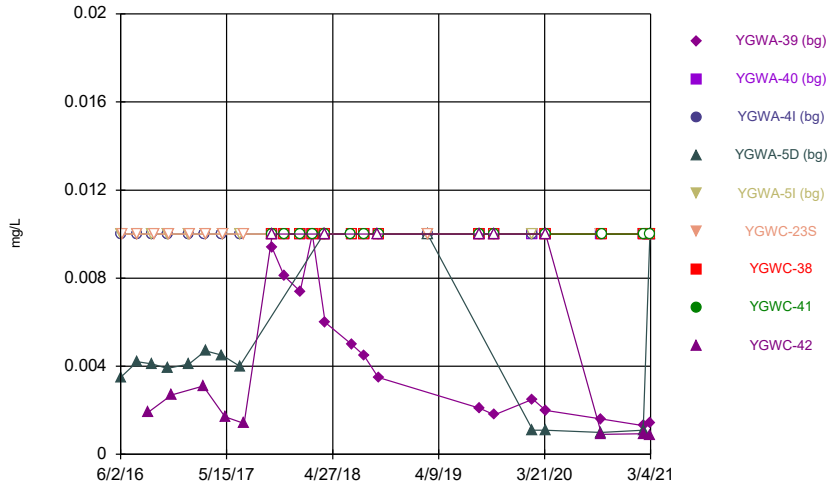
Time Series



Constituent: Molybdenum Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

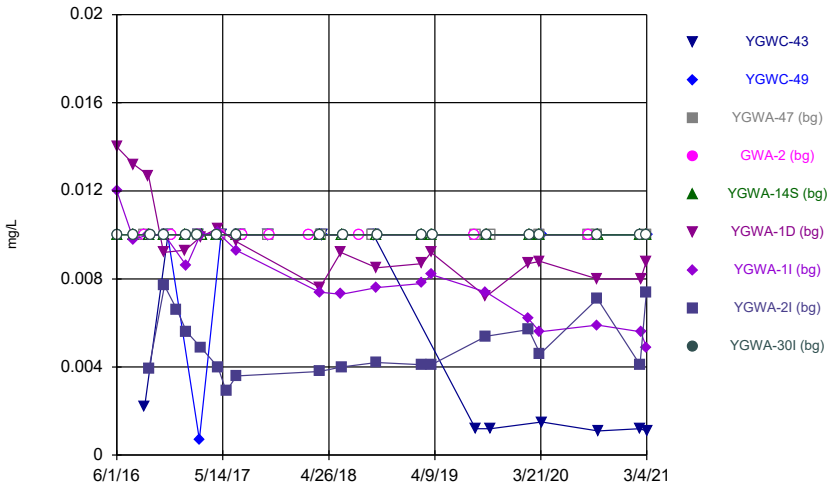
Time Series



Constituent: Molybdenum Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

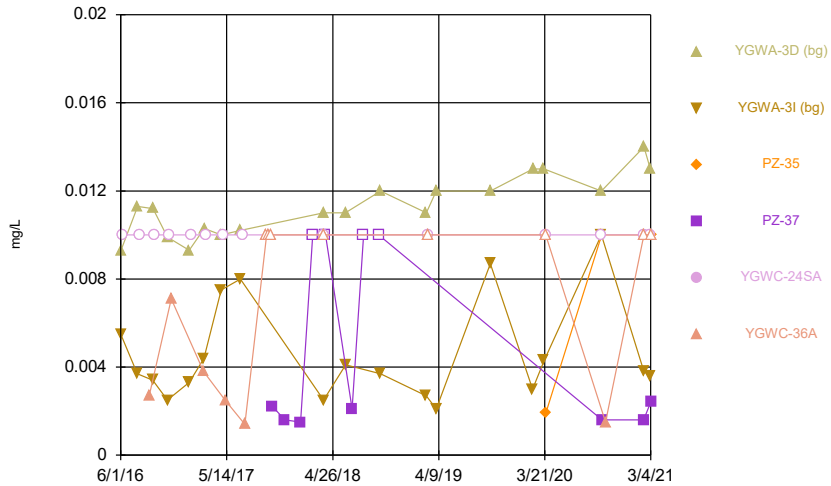
Time Series



Constituent: Molybdenum Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

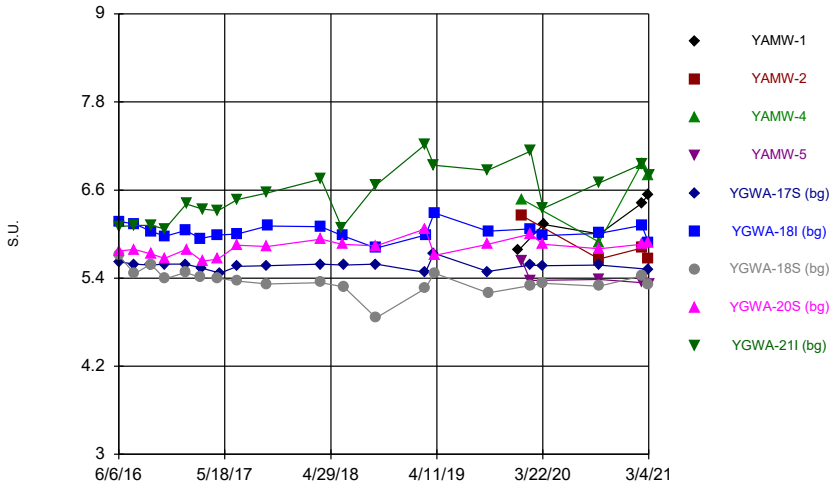
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Time Series

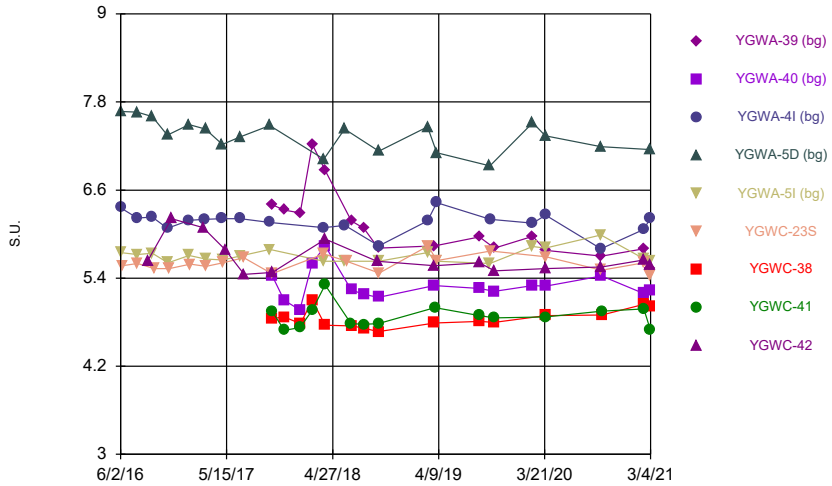


Constituent: pH Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

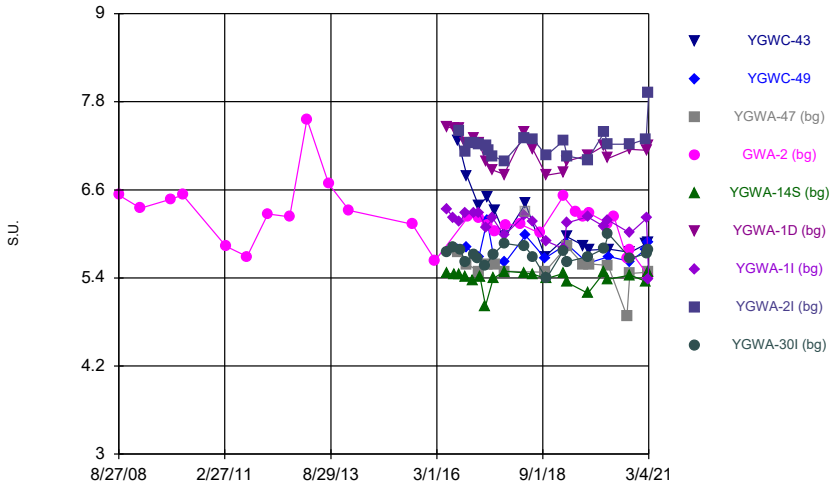


Constituent: pH Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

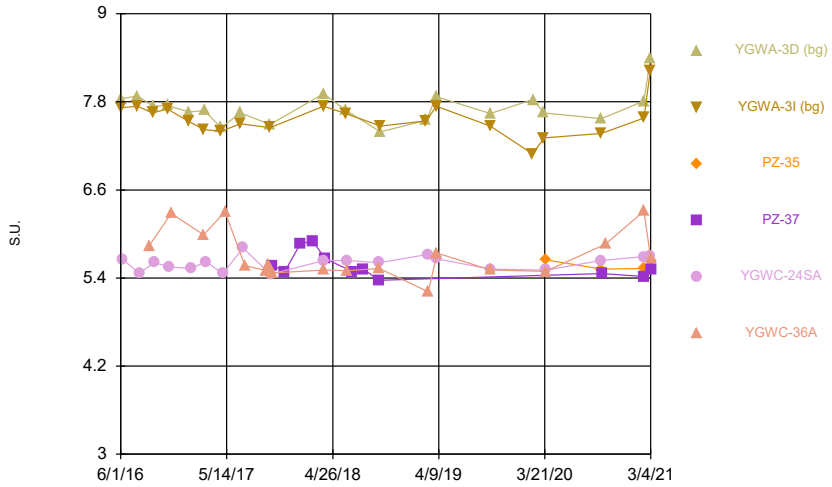


Constituent: pH Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

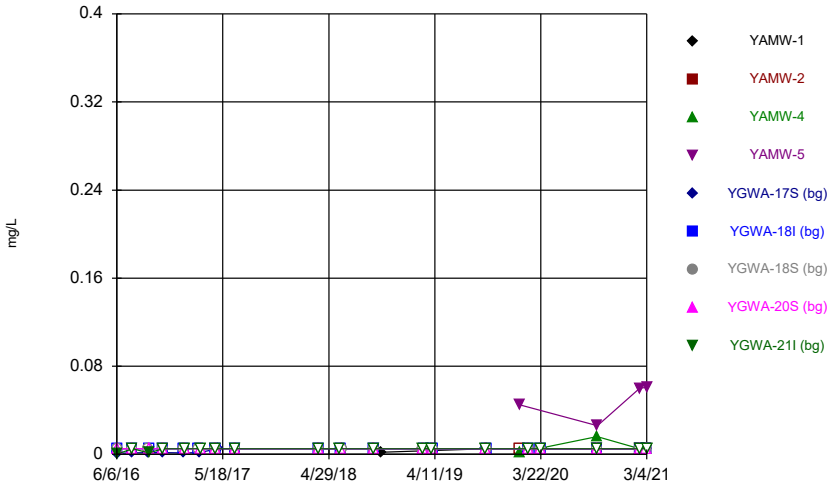


Constituent: pH Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

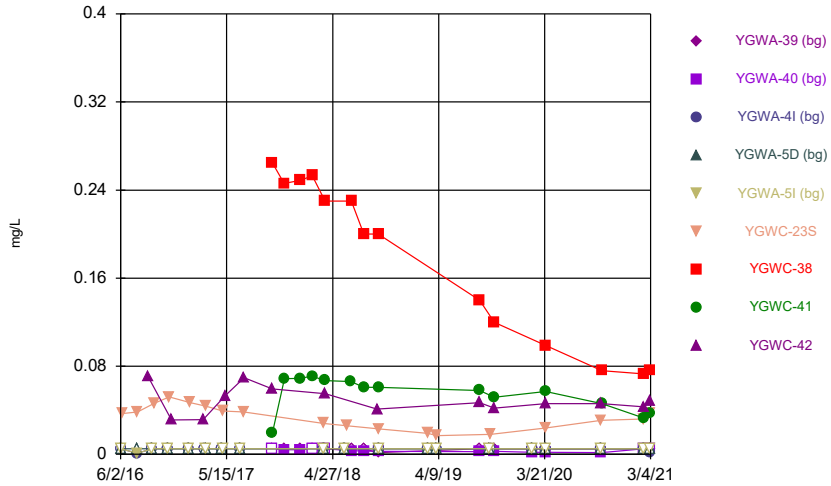
Time Series



Constituent: Selenium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

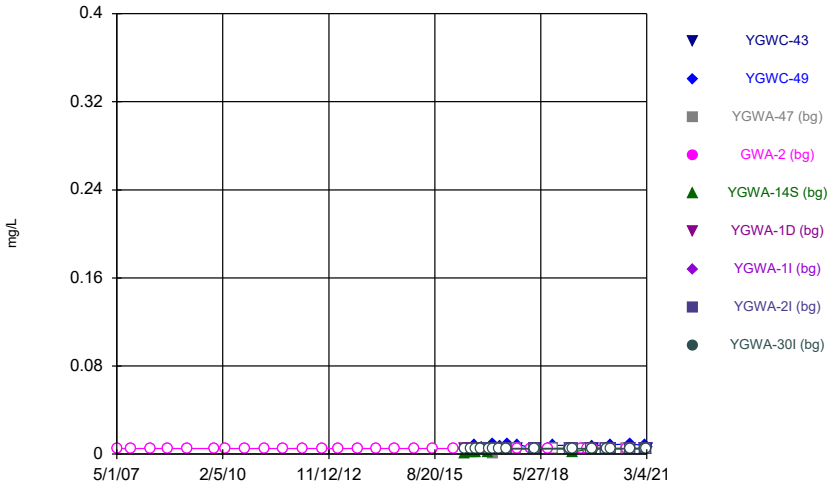
Time Series



Constituent: Selenium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

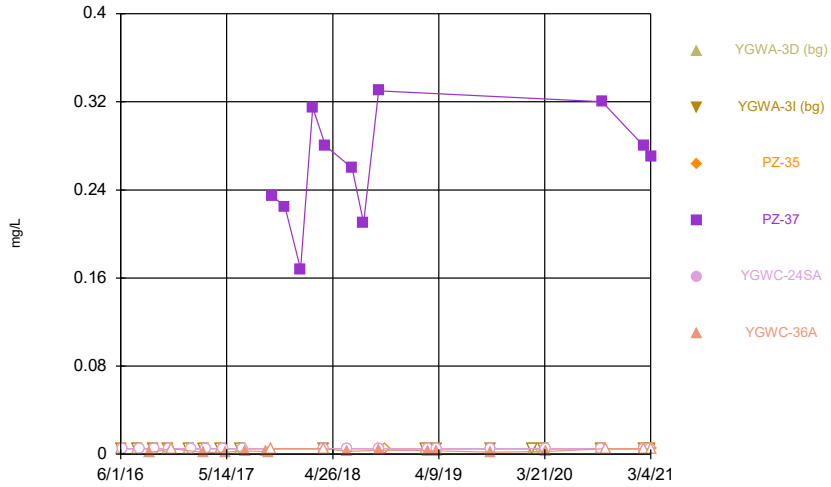
Time Series



Constituent: Selenium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

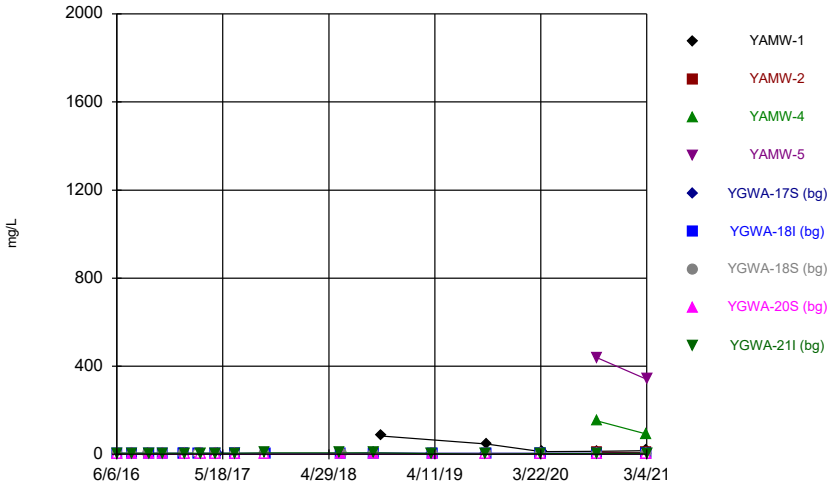
Time Series



Constituent: Selenium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

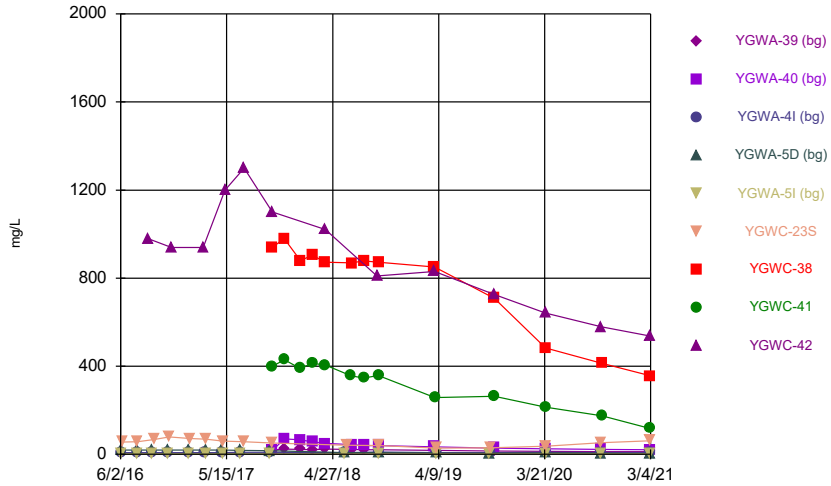
Time Series



Constituent: Sulfate Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

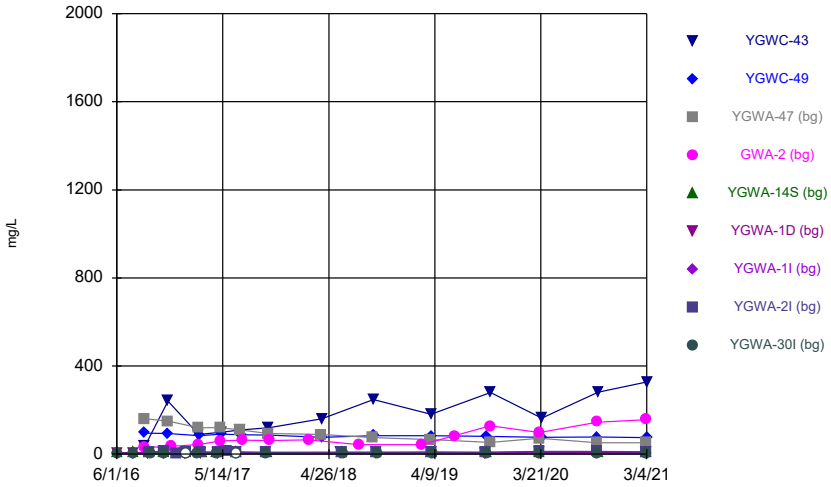
Time Series



Constituent: Sulfate Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

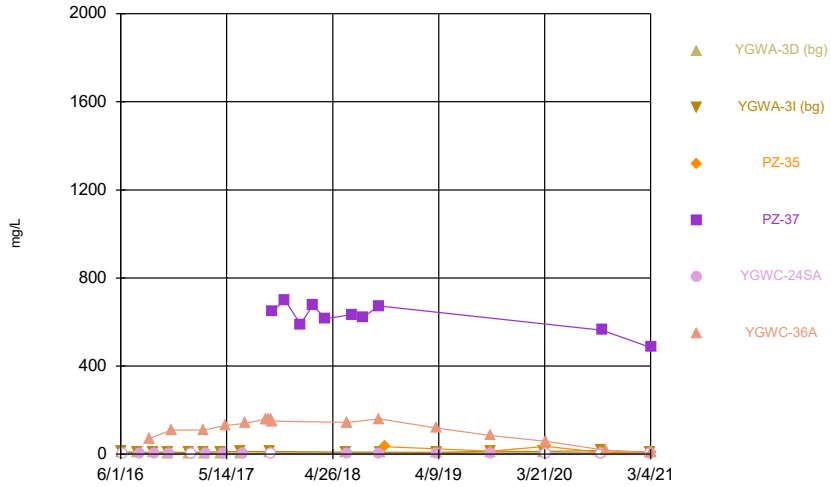
Time Series



Constituent: Sulfate Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

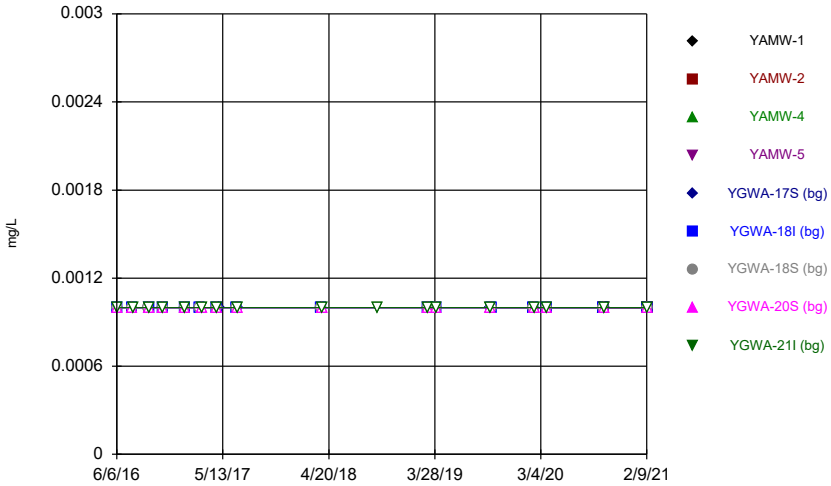
Time Series



Constituent: Sulfate Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

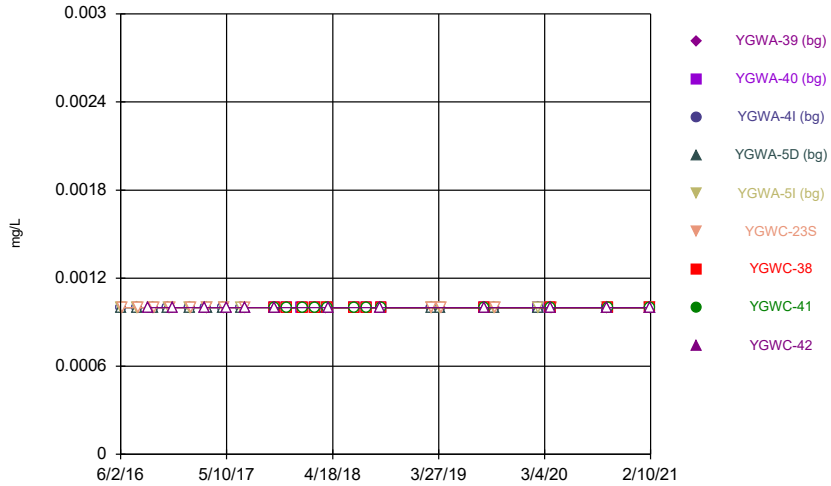
Time Series



Constituent: Thallium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

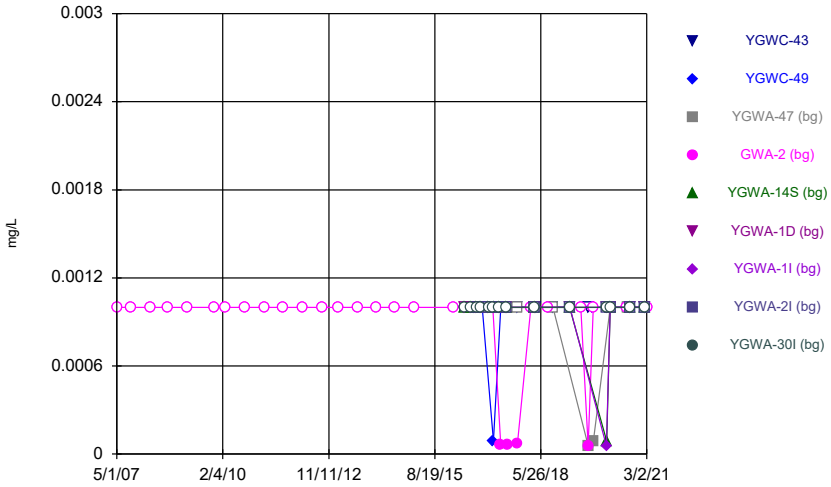
Time Series



Constituent: Thallium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

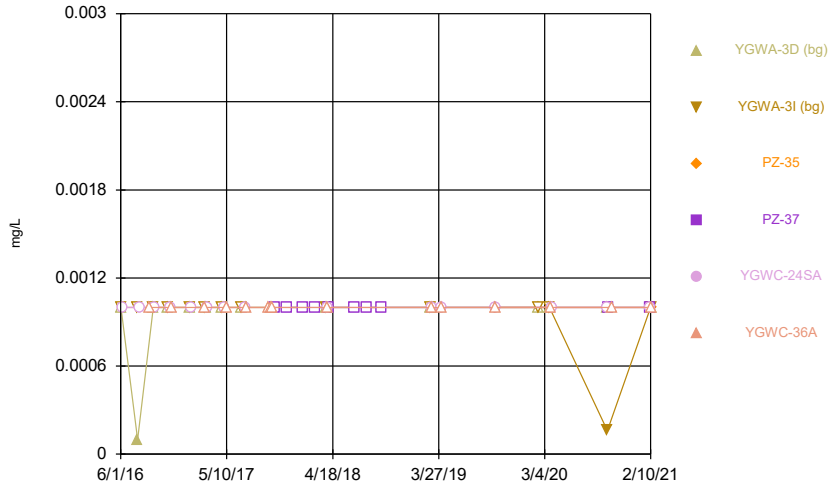
Time Series



Constituent: Thallium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

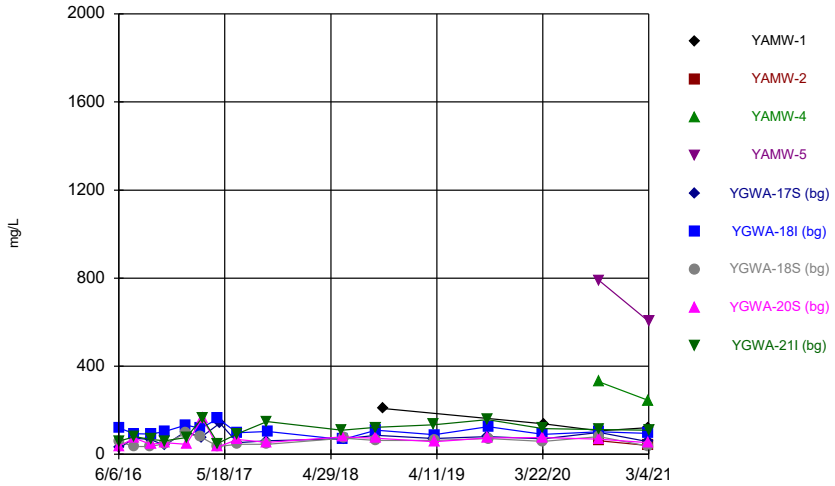
Time Series



Constituent: Thallium Analysis Run 5/6/2021 8:34 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series

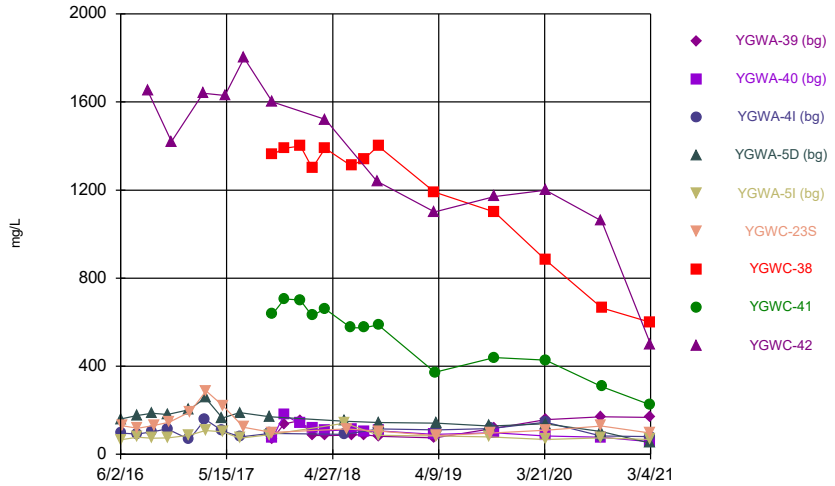


Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



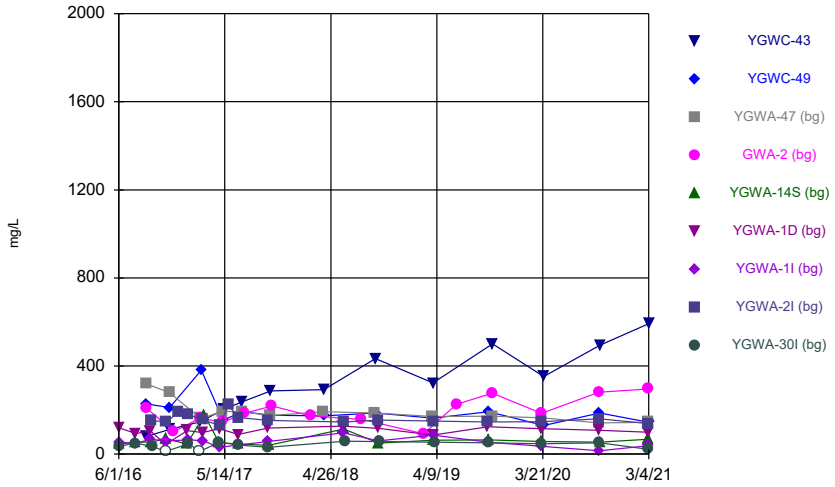
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

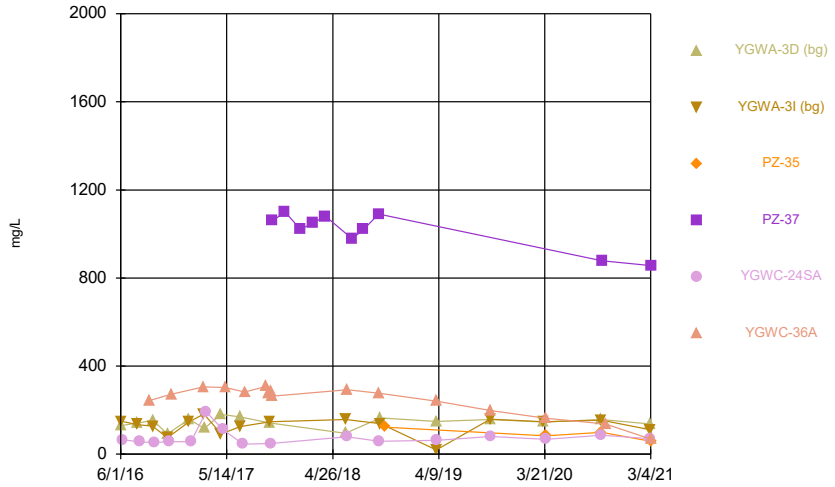


Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:34 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.003	<0.003		
6/7/2016					<0.003			<0.003	<0.003
7/27/2016					<0.003	0.0005 (J)	<0.003	<0.003	
7/28/2016									<0.003
9/16/2016					<0.003		<0.003		
9/19/2016						<0.003		<0.003	0.001 (J)
11/2/2016								<0.003	
11/3/2016					<0.003	<0.003	<0.003		<0.003
1/11/2017					<0.003	<0.003	<0.003		
1/13/2017								<0.003	<0.003
3/1/2017						<0.003	<0.003		
3/2/2017					<0.003				
3/6/2017								<0.003	0.0005 (J)
4/26/2017						<0.003	<0.003	<0.003	<0.003
5/2/2017					<0.003				
6/28/2017						<0.003	<0.003		
6/29/2017					<0.003			<0.003	<0.003
3/28/2018					<0.003	<0.003	<0.003		
3/29/2018								<0.003	<0.003
3/5/2019					<0.003		<0.003	<0.003	0.0011 (J)
3/6/2019						<0.003			
4/2/2019					<0.003				0.0011 (J)
4/3/2019						<0.003	<0.003	<0.003	
9/24/2019									0.0035
9/25/2019					<0.003			<0.003	
9/26/2019	<0.003					0.00056 (J)	<0.003		
2/11/2020					<0.003	<0.003	<0.003		
2/12/2020								<0.003	0.0015 (J)
3/24/2020					<0.003	<0.003	<0.003	<0.003	0.0017 (J)
3/25/2020	<0.003								
9/23/2020		<0.003	0.00065 (J)		<0.003	<0.003	<0.003		
9/24/2020	<0.003			0.00033 (J)				<0.003	0.0047
2/9/2021	0.00037 (J)	<0.003	0.0011 (J)	<0.003		<0.003	<0.003	0.00032 (J)	0.0013 (J)
3/3/2021	0.025	<0.003	0.00062 (J)		<0.003	<0.003	0.00067 (J)	<0.003	
3/4/2021				<0.003					0.0014 (J)

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.003	<0.003	<0.003				
6/7/2016						<0.003			
7/26/2016			0.0003 (J)	<0.003	<0.003				
7/28/2016						<0.003			
8/30/2016									<0.003
9/14/2016			<0.003	<0.003	<0.003				
9/20/2016						<0.003			
11/2/2016			<0.003	<0.003					
11/4/2016					<0.003				
11/8/2016						<0.003			
11/16/2016									<0.003
1/12/2017				<0.003	<0.003				
1/13/2017			<0.003						
1/16/2017						<0.003			
2/27/2017									<0.003
3/6/2017			<0.003						
3/7/2017				<0.003	<0.003				
3/9/2017						<0.003			
5/1/2017			<0.003	<0.003					
5/2/2017					<0.003	<0.003			
5/10/2017									<0.003
6/27/2017				<0.003	<0.003				
6/29/2017			<0.003						
7/10/2017						<0.003			
7/11/2017									<0.003
10/11/2017	0.0006 (J)								
10/12/2017		<0.003					<0.003	<0.003	<0.003
11/20/2017	<0.003	<0.003					<0.003		
11/21/2017								<0.003	
1/10/2018		<0.003							
1/11/2018	<0.003							<0.003	
1/12/2018							<0.003		
2/19/2018		<0.003						<0.003	
2/20/2018	<0.003						<0.003		
3/29/2018			<0.003	<0.003	<0.003				
3/30/2018						<0.003			
4/3/2018	<0.003	<0.003					<0.003	<0.003	
4/4/2018									<0.003
6/27/2018								<0.003	
6/28/2018	<0.003	<0.003					<0.003		
8/7/2018	<0.003	<0.003					0.0015 (J)	<0.003	
9/20/2018									<0.003
9/24/2018	<0.003	<0.003					<0.003	<0.003	
3/4/2019			<0.003	<0.003	<0.003				
3/6/2019						<0.003			
4/3/2019			<0.003	<0.003	<0.003				
4/4/2019						<0.003			
8/21/2019	<0.003	<0.003							
8/22/2019							<0.003	<0.003	<0.003
9/24/2019				<0.003	<0.003				
9/25/2019			<0.003						
9/27/2019						0.00029 (J)			

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
2/12/2020	<0.003	<0.003	<0.003	<0.003	<0.003				
3/24/2020		<0.003		<0.003	<0.003				
3/25/2020	0.0014 (J)		<0.003				0.00063 (J)	<0.003	<0.003
3/26/2020						<0.003			
9/22/2020			<0.003	<0.003	<0.003				
9/24/2020	<0.003	<0.003				0.00085 (J)			<0.003
9/25/2020							0.00061 (J)	<0.003	
2/8/2021				<0.003	<0.003				
2/9/2021			<0.003			0.00052 (J)	0.00031 (J)		
2/10/2021	<0.003	<0.003						0.0014 (J)	0.00053 (J)
3/2/2021				<0.003	<0.003				
3/3/2021			<0.003						
3/4/2021	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.003
7/26/2016					0.0005 (J)	0.001 (J)			
8/30/2016			0.0028 (J)						
8/31/2016	<0.003			<0.003					
9/1/2016		<0.003							
9/13/2016						0.001 (J)	<0.003		
9/14/2016								<0.003	
9/15/2016					<0.003				
9/19/2016									<0.003
11/1/2016						0.0015 (J)			<0.003
11/2/2016					<0.003				
11/4/2016							<0.003	<0.003	
11/14/2016			<0.003						
11/15/2016		<0.003							
11/16/2016	<0.003								
11/28/2016				0.0014 (J)					
12/15/2016								0.0012 (J)	
1/10/2017					<0.003				
1/11/2017						<0.003			
1/16/2017							<0.003	<0.003	<0.003
2/21/2017									<0.003
2/22/2017				<0.003					
2/24/2017	<0.003		<0.003						
2/27/2017		0.0011 (J)							
3/2/2017						0.0004 (J)	<0.003		
3/3/2017								<0.003	
3/8/2017					<0.003				
4/26/2017					<0.003				<0.003
4/27/2017						0.0004 (J)	0.0017 (J)		
4/28/2017								0.0015 (J)	
5/8/2017			0.0004 (J)	<0.003					

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Constituent: Antimony (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.003							
5/10/2017	<0.003								
5/26/2017								0.0005 (J)	
6/27/2017						<0.003	<0.003		
6/28/2017								<0.003	
6/30/2017					<0.003				<0.003
7/11/2017	<0.003		0.0006 (J)						
7/13/2017		<0.003							
7/17/2017				<0.003					
10/10/2017			<0.003						
10/11/2017		<0.003							
10/12/2017	<0.003								
10/16/2017				<0.003					
2/19/2018				<0.003					
3/27/2018					<0.003		<0.003		<0.003
3/28/2018								<0.003	
3/29/2018						<0.003			
4/2/2018			<0.003						
4/4/2018	<0.003	<0.003							
8/6/2018				<0.003					
9/19/2018			<0.003						
9/20/2018	<0.003	<0.003							
2/25/2019				<0.003					
2/26/2019					<0.003				<0.003
2/27/2019						<0.003	<0.003	<0.003	
6/12/2019				<0.003					
8/19/2019				<0.003					
8/20/2019			<0.003						
8/21/2019	<0.003								
9/26/2019		<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)	<0.003
3/25/2020	0.00031 (J)	0.00053 (J)							
8/26/2020				0.00042 (J)					
8/27/2020			0.00048 (J)						
9/22/2020			<0.003	0.00044 (J)					
9/23/2020						<0.003	<0.003	<0.003	
9/24/2020		<0.003							<0.003
9/25/2020	<0.003				<0.003				
2/9/2021	<0.003	<0.003							
2/10/2021					<0.003			0.0013 (J)	
2/11/2021									<0.003
2/12/2021						<0.003	<0.003		
3/1/2021			0.00048 (J)						<0.003
3/2/2021				<0.003	<0.003				
3/3/2021						<0.003	<0.003	<0.003	
3/4/2021	<0.003	<0.003							

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Constituent: Antimony (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.003				
6/2/2016	<0.003					
6/8/2016					<0.003	
7/25/2016		<0.003				
7/26/2016	0.002 (J)					
8/1/2016					<0.003	
9/2/2016						<0.003
9/14/2016		<0.003				
9/15/2016	0.0027 (J)					
9/20/2016					0.0009 (J)	
11/1/2016	<0.003	<0.003				
11/8/2016					<0.003	
11/14/2016						0.0014 (J)
1/11/2017	<0.003	<0.003				
1/17/2017					<0.003	
2/28/2017						0.0004 (J)
3/1/2017		<0.003				
3/2/2017	0.0008 (J)					
3/8/2017					<0.003	
4/26/2017	<0.003	<0.003				
5/2/2017					<0.003	
5/9/2017						<0.003
6/28/2017	<0.003	<0.003				
7/7/2017					<0.003	
7/13/2017						<0.003
9/22/2017						<0.003
9/29/2017						<0.003
10/6/2017						<0.003
10/12/2017				<0.003		
11/21/2017				<0.003		
1/11/2018				<0.003		
2/20/2018				<0.003		
3/28/2018	<0.003	<0.003				
3/30/2018					<0.003	<0.003
4/3/2018				<0.003		
6/29/2018				<0.003		
8/6/2018				<0.003		
9/24/2018				<0.003		
2/27/2019	<0.003	<0.003				
3/5/2019					<0.003	
3/6/2019						0.0011 (J)
4/4/2019					<0.003	0.0041
9/26/2019			<0.003		<0.003	0.0065
2/11/2020		<0.003				
2/12/2020	<0.003					
3/19/2020	0.00064 (J)	<0.003				
3/25/2020			<0.003			0.0011 (J)
3/26/2020					<0.003	
9/23/2020	<0.003	<0.003			<0.003	
9/24/2020			<0.003			
9/25/2020				0.0014 (J)		
10/7/2020						<0.003

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Constituent: Antimony (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/9/2021				0.00035 (J)	<0.003	
2/10/2021	<0.003	<0.003	<0.003			0.028
3/3/2021	<0.003	<0.003			<0.003	
3/4/2021			0.00039 (J)	<0.003		0.0015 (J)

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Constituent: Arsenic (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.005	<0.005		
6/7/2016					<0.005			<0.005	<0.005
7/27/2016					<0.005	<0.005	<0.005	<0.005	
7/28/2016									<0.005
9/16/2016					<0.005		<0.005		
9/19/2016						<0.005		<0.005	<0.005
11/2/2016								<0.005	
11/3/2016					<0.005	<0.005	<0.005		<0.005
1/11/2017					<0.005	<0.005	<0.005		
1/13/2017								<0.005	<0.005
3/1/2017						<0.005	<0.005		
3/2/2017					<0.005				
3/6/2017								<0.005	0.0017 (J)
4/26/2017						<0.005	<0.005	<0.005	<0.005
5/2/2017					<0.005				
6/28/2017						<0.005	<0.005		
6/29/2017					<0.005			<0.005	<0.005
3/28/2018					<0.005	<0.005	0.00061 (J)		
3/29/2018								<0.005	0.0015 (J)
6/5/2018									0.0013 (J)
6/6/2018								<0.005	
6/7/2018						0.00066 (J)			
6/11/2018					<0.005		<0.005		
9/25/2018					<0.005	<0.005	<0.005	<0.005	0.0022 (J)
10/16/2018	<0.005								
3/5/2019					<0.005		<0.005	<0.005	0.0013 (J)
3/6/2019						<0.005			
4/2/2019					<0.005				0.00096 (J)
4/3/2019						<0.005	<0.005	<0.005	
9/24/2019									0.0026 (J)
9/25/2019					<0.005			<0.005	
9/26/2019	<0.005					<0.005	<0.005		
2/11/2020					0.0022 (J)	0.0014 (J)	0.0026 (J)		
2/12/2020								<0.005	0.0025 (J)
3/24/2020					<0.005	<0.005	<0.005	<0.005	0.0013 (J)
3/25/2020	<0.005								
9/23/2020		<0.005	<0.005		<0.005	<0.005	<0.005		
9/24/2020	<0.005			0.0015 (J)				<0.005	0.0014 (J)
2/9/2021	<0.005	<0.005	0.001 (J)	0.00095 (J)		<0.005	<0.005	<0.005	0.001 (J)
3/3/2021	<0.005	<0.005	0.00079 (J)		<0.005	<0.005	<0.005	<0.005	
3/4/2021				<0.005					0.00078 (J)

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Constituent: Arsenic (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.005	0.00071 (J)	<0.005				
6/7/2016						<0.005			
7/26/2016			<0.005	0.001 (J)	<0.005				
7/28/2016						<0.005			
8/30/2016									0.0023 (J)
9/14/2016			<0.005	<0.005	<0.005				
9/20/2016						<0.005			
11/2/2016			<0.005	<0.005					
11/4/2016					<0.005				
11/8/2016						<0.005			
11/16/2016									0.0017 (J)
1/12/2017				<0.005	<0.005				
1/13/2017			<0.005						
1/16/2017						<0.005			
2/27/2017									0.002 (J)
3/6/2017			<0.005						
3/7/2017				0.0012 (J)	<0.005				
3/9/2017						<0.005			
5/1/2017			<0.005	<0.005					
5/2/2017					<0.005	<0.005			
5/10/2017									0.0022 (J)
6/27/2017				0.0019 (J)	<0.005				
6/29/2017			<0.005						
7/10/2017						<0.005			
7/11/2017									0.003 (J)
10/11/2017	0.0009 (J)								
10/12/2017		<0.005					0.0023 (J)	0.0011 (J)	0.0031 (J)
11/20/2017	<0.005	<0.005					0.0008 (J)		
11/21/2017								<0.005	
1/10/2018		<0.005							
1/11/2018	<0.005							<0.005	
1/12/2018							0.001 (J)		
2/19/2018		<0.005						<0.005	
2/20/2018	<0.005						0.00096 (J)		
3/29/2018			<0.005	0.0006 (J)	<0.005				
3/30/2018						<0.005			
4/3/2018	<0.005	<0.005					0.0015 (J)	0.00072 (J)	
4/4/2018									0.0023 (J)
6/6/2018				0.0013 (J)					
6/7/2018			0.00059 (J)		<0.005				
6/12/2018						<0.005			
6/27/2018								0.00062 (J)	
6/28/2018	<0.005	<0.005					0.0017 (J)		
8/7/2018	<0.005	<0.005					0.00072 (J)	<0.005	
9/20/2018									0.0018 (J)
9/24/2018	<0.005	<0.005					0.0017 (J)	0.001 (J)	
9/26/2018			<0.005	0.0014 (J)	<0.005				
9/27/2018						<0.005			
3/4/2019			<0.005	<0.005	<0.005				
3/6/2019						<0.005			
4/3/2019			<0.005	<0.005	<0.005				
4/4/2019						<0.005			

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Constituent: Arsenic (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	0.00058 (J)	<0.005							
8/22/2019							0.00055 (J)	0.00036 (J)	0.00089 (J)
9/24/2019				0.00043 (J)	<0.005				
9/25/2019			<0.005						
9/27/2019						<0.005			
10/9/2019	0.00063 (J)	<0.005					0.00057 (J)	0.00052 (J)	0.00078 (J)
2/12/2020	0.00058 (J)	0.0034 (J)	<0.005	0.0046 (J)	0.002 (J)				
3/24/2020		<0.005		0.00065 (J)	<0.005				
3/25/2020	0.0012 (J)		<0.005				0.00068 (J)	0.001 (J)	0.0013 (J)
3/26/2020						0.0012 (J)			
9/22/2020			<0.005	0.001 (J)	<0.005				
9/24/2020	<0.005	<0.005				<0.005			<0.005
9/25/2020							<0.005	<0.005	
2/8/2021				<0.005	<0.005				
2/9/2021			<0.005			<0.005	0.00098 (J)		
2/10/2021	<0.005	<0.005						<0.005	0.0016 (J)
3/2/2021				<0.005	<0.005				
3/3/2021			<0.005						
3/4/2021	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005

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Constituent: Arsenic (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.005
7/26/2016					<0.005	0.0016 (J)			
8/30/2016			<0.005						
8/31/2016	<0.005			<0.005					
9/1/2016		<0.005							
9/13/2016						<0.005	<0.005		
9/14/2016								<0.005	
9/15/2016					<0.005				
9/19/2016									<0.005
11/1/2016						<0.005			<0.005
11/2/2016					<0.005				
11/4/2016							<0.005	0.0017 (J)	
11/14/2016			<0.005						
11/15/2016		<0.005							
11/16/2016	<0.005								
11/28/2016				<0.005					
12/15/2016								0.0023 (J)	
1/10/2017					<0.005				
1/11/2017						0.0017 (J)			
1/16/2017							<0.005	0.0018 (J)	<0.005
2/21/2017									<0.005
2/22/2017				<0.005					
2/24/2017	<0.005		<0.005						
2/27/2017		<0.005							
3/2/2017						0.0014 (J)	<0.005		
3/3/2017								0.0016 (J)	
3/8/2017					<0.005				
4/26/2017					<0.005				<0.005
4/27/2017						0.0018 (J)	<0.005		
4/28/2017								0.002 (J)	
5/8/2017			<0.005	<0.005					

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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.005							
5/10/2017	<0.005								
5/26/2017								0.0005 (J)	
6/27/2017						0.0018 (J)	<0.005		
6/28/2017								0.0016 (J)	
6/30/2017					<0.005				<0.005
7/11/2017	<0.005		<0.005						
7/13/2017		<0.005							
7/17/2017				<0.005					
10/10/2017			0.0007 (J)						
10/11/2017		0.0006 (J)							
10/12/2017	<0.005								
10/16/2017				<0.005					
2/19/2018				<0.005					
3/27/2018					<0.005		<0.005		<0.005
3/28/2018								0.0013 (J)	
3/29/2018						0.0017 (J)			
4/2/2018			<0.005						
4/4/2018	<0.005	<0.005							
6/5/2018						0.0013 (J)			
6/6/2018							<0.005		
6/7/2018								0.00082 (J)	
6/8/2018					<0.005				
6/11/2018									<0.005
8/6/2018				<0.005					
9/19/2018			0.00072 (J)						
9/20/2018	0.00099 (J)	0.001 (J)							
10/1/2018					<0.005	0.0016 (J)	<0.005	0.0011 (J)	
10/2/2018									<0.005
2/25/2019				<0.005					
2/26/2019					<0.005				<0.005
2/27/2019						0.0015 (J)	<0.005	0.001 (J)	
3/28/2019						0.00072 (J)	<0.005		
3/29/2019					<0.005			0.00063 (J)	
4/1/2019									<0.005
6/12/2019				0.00038 (J)					
8/19/2019				0.00095 (J)					
8/20/2019			<0.005						
8/21/2019	<0.005								
9/24/2019						0.0014 (J)	<0.005	<0.005	
9/25/2019					<0.005				<0.005
9/26/2019		<0.005							
10/8/2019			<0.005	<0.005					
10/9/2019	0.00051 (J)								
2/10/2020						0.0026 (J)	0.0005 (J)		
2/11/2020								0.0044 (J)	
2/12/2020					<0.005				0.0032 (J)
3/17/2020			<0.005	<0.005					
3/18/2020					<0.005		<0.005		
3/19/2020						0.00095 (J)		0.00066 (J)	<0.005
3/25/2020	0.0007 (J)	0.00086 (J)							
8/26/2020				<0.005					

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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/27/2020			<0.005						
9/22/2020			<0.005	<0.005					
9/23/2020						0.0011 (J)	<0.005	0.001 (J)	
9/24/2020		<0.005							<0.005
9/25/2020	<0.005				<0.005				
2/9/2021	<0.005	<0.005							
2/10/2021					<0.005			<0.005	
2/11/2021									<0.005
2/12/2021						<0.005	<0.005		
3/1/2021			<0.005						<0.005
3/2/2021				<0.005	<0.005				
3/3/2021						<0.005	<0.005	0.00098 (J)	
3/4/2021	<0.005	<0.005							

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.005				
6/2/2016	<0.005					
6/8/2016					<0.005	
7/25/2016		<0.005				
7/26/2016	<0.005					
8/1/2016					<0.005	
9/2/2016						<0.005
9/14/2016		<0.005				
9/15/2016	<0.005					
9/20/2016					<0.005	
11/1/2016	<0.005	<0.005				
11/8/2016					<0.005	
11/14/2016						<0.005
1/11/2017	<0.005	<0.005				
1/17/2017					<0.005	
2/28/2017						0.0006 (J)
3/1/2017		0.0004 (J)				
3/2/2017	<0.005					
3/8/2017					<0.005	
4/26/2017	<0.005	<0.005				
5/2/2017					<0.005	
5/9/2017						0.0006 (J)
6/28/2017	0.0007 (J)	0.0011 (J)				
7/7/2017					<0.005	
7/13/2017						<0.005
9/22/2017						<0.005
9/29/2017						<0.005
10/6/2017						<0.005
10/12/2017				0.0014 (J)		
11/21/2017				0.0008 (J)		
1/11/2018				0.0006 (J)		
2/20/2018				<0.005		
3/28/2018	<0.005	<0.005				
3/30/2018					<0.005	<0.005
4/3/2018				0.0012 (J)		
6/7/2018	<0.005					
6/8/2018		<0.005				
6/12/2018					<0.005	
6/13/2018						0.00066 (J)
6/29/2018				0.0011 (J)		
8/6/2018				<0.005		
9/24/2018				0.00094 (J)		
9/26/2018					<0.005	<0.005
10/1/2018	<0.005	<0.005				
10/16/2018			0.00069 (J)			
2/27/2019	<0.005	<0.005				
3/5/2019					<0.005	
3/6/2019						<0.005
4/1/2019	<0.005	<0.005				
4/4/2019					<0.005	<0.005
9/25/2019	<0.005	<0.005				
9/26/2019			<0.005		<0.005	<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/11/2020		0.0041 (J)				
2/12/2020	0.0038 (J)					
3/19/2020	<0.005	<0.005				
3/25/2020			<0.005			<0.005
3/26/2020					0.0015 (J)	
9/23/2020	<0.005	<0.005			<0.005	
9/24/2020			<0.005			
9/25/2020				<0.005		
10/7/2020						<0.005
2/9/2021				0.0015 (J)	<0.005	
2/10/2021	0.00094 (J)	0.00078 (J)	0.00096 (J)			0.00088 (J)
3/3/2021	<0.005	<0.005			<0.005	
3/4/2021			<0.005	<0.005		<0.005

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						0.028	0.019		
6/7/2016					0.012			0.014	0.0058
7/27/2016					0.0126	0.0294	0.0167	0.0141	
7/28/2016									0.0068 (J)
9/16/2016					0.0127		0.0168		
9/19/2016						0.0247		0.0155	0.0071 (J)
11/2/2016								0.0157	
11/3/2016					0.0128	0.0248	0.0159		0.0092 (J)
1/11/2017					0.0142	0.0266	0.0162		
1/13/2017								0.0158	0.0105
3/1/2017						0.0275	0.0195		
3/2/2017					0.0155				
3/6/2017								0.0163	0.0105
4/26/2017						0.024	0.0182	0.0177	0.011
5/2/2017					0.0138				
6/28/2017						0.0237	0.018		
6/29/2017					0.0128			0.017	0.0109
3/28/2018					0.014	0.024	0.021		
3/29/2018								0.014	<0.01
6/5/2018									0.011
6/6/2018								0.015	
6/7/2018						0.023			
6/11/2018					0.013		0.019		
9/25/2018					0.014	0.023	0.019	0.015	0.011
10/16/2018	0.048								
3/5/2019					0.015		0.02	0.016	0.011
3/6/2019						0.024			
4/2/2019					0.016				0.011
4/3/2019						0.025	0.017	0.018	
9/24/2019									0.011
9/25/2019					0.015			0.014	
9/26/2019	0.047					0.021	0.017		
2/11/2020					0.015	0.022	0.019		
2/12/2020								0.014	0.011
3/24/2020					0.015	0.021	0.017	0.015	0.011
3/25/2020	0.04								
9/23/2020		0.0092 (J)	0.0063 (J)		0.015	0.021	0.016		
9/24/2020	0.028			0.057				0.015	0.01
2/9/2021	0.039	0.0085 (J)	0.02	0.042		0.023	0.017	0.015	0.011
3/3/2021	0.035	0.0082	0.021		0.017	0.023	0.017	0.015	
3/4/2021				0.039					0.011

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			0.013	0.0084	0.019				
6/7/2016						0.045			
7/26/2016			0.0158	0.01	0.0179				
7/28/2016						0.0511			
8/30/2016									0.0455
9/14/2016			0.0143	0.0085 (J)	0.0181				
9/20/2016						0.0561			
11/2/2016			0.0148	0.0091 (J)					
11/4/2016					0.0165				
11/8/2016						0.054			
11/16/2016									0.0541
1/12/2017				0.0089 (J)	0.0199				
1/13/2017			0.0146						
1/16/2017						0.0528			
2/27/2017									0.0573
3/6/2017			0.0141						
3/7/2017				0.009 (J)	0.0196				
3/9/2017						0.0469			
5/1/2017			0.0149	0.0083 (J)					
5/2/2017					0.0202	0.0427			
5/10/2017									0.0517
6/27/2017				0.0074 (J)	0.0184				
6/29/2017			0.0154						
7/10/2017						0.0395			
7/11/2017									0.0451
10/11/2017	0.0092 (J)								
10/12/2017		0.0328					0.0269	0.0394	0.0429
11/20/2017	0.0081 (J)	0.0671					0.0255		
11/21/2017								0.032	
1/10/2018		0.0656							
1/11/2018	0.0077 (J)							0.03	
1/12/2018							0.0236		
2/19/2018		0.0598						0.0308	
2/20/2018	<0.01						0.0255		
3/29/2018			0.014	<0.01	0.021				
3/30/2018						0.03			
4/3/2018	<0.01	0.045					0.023	0.03	
4/4/2018									0.041
6/6/2018				0.008 (J)					
6/7/2018			0.014		0.019				
6/12/2018						0.024			
6/27/2018								0.028	
6/28/2018	0.0078 (J)	0.047					0.024		
8/7/2018	0.0078 (J)	0.048					0.023	0.027	
9/20/2018									0.038
9/24/2018	0.0071 (J)	0.042					0.021	0.026	
9/26/2018			0.02	0.0075 (J)	0.019				
9/27/2018						0.022			
3/4/2019			0.016	0.0077 (J)	0.019				
3/6/2019						0.019			
4/3/2019			0.017	0.0087 (J)	0.023				
4/4/2019						0.019			

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	0.015	0.035							
8/22/2019							0.019	0.021	0.031
9/24/2019				0.0075 (J)	0.019				
9/25/2019			0.015						
9/27/2019						0.018			
10/9/2019	0.013	0.036					0.019	0.021	0.027
2/12/2020	0.011	0.035	0.012	0.0079 (J)	0.021				
3/24/2020		0.033		0.0076 (J)	0.021				
3/25/2020	0.014		0.016				0.018	0.021	0.03
3/26/2020						0.027			
9/22/2020			0.013	0.0076 (J)	0.019				
9/24/2020	0.016	0.028				0.035			0.026
9/25/2020							0.015	0.016	
2/8/2021				0.0079 (J)	0.02				
2/9/2021			0.013			0.042	0.016		
2/10/2021	0.027	0.032						0.017	0.031
3/2/2021				0.014	0.019				
3/3/2021			0.014						
3/4/2021	0.028	0.032				0.043	0.016	0.017	0.03

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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					0.0081				0.0064
7/25/2016							0.0091 (J)		0.0071 (J)
7/26/2016					0.0082 (J)	0.006 (J)			
8/30/2016			0.0413						
8/31/2016	0.0065 (J)			0.0542					
9/1/2016		0.077							
9/13/2016						0.0084 (J)	0.008 (J)		
9/14/2016								0.0037 (J)	
9/15/2016					0.0087 (J)				
9/19/2016									0.0069 (J)
11/1/2016						0.0062 (J)			0.007 (J)
11/2/2016					0.0082 (J)				
11/4/2016							0.0067 (J)	0.0059 (J)	
11/14/2016			0.0383						
11/15/2016		0.0772							
11/16/2016	0.0092 (J)								
11/28/2016				0.0529					
12/15/2016								0.0056 (J)	
1/10/2017					0.0086 (J)				
1/11/2017						0.0069 (J)			
1/16/2017							0.0096 (J)	0.0049 (J)	0.0071 (J)
2/21/2017									0.0077 (J)
2/22/2017				0.0607					
2/24/2017	0.0144		0.0351						
2/27/2017		0.0888							
3/2/2017						0.0071 (J)	0.0112		
3/3/2017								0.0046 (J)	
3/8/2017					0.0088 (J)				
4/26/2017					0.0085 (J)				0.0074 (J)
4/27/2017						0.0064 (J)	0.0106		
4/28/2017								0.0039 (J)	
5/8/2017			0.0251	0.065					

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		0.0792							
5/10/2017	0.0173								
5/26/2017								0.0034 (J)	
6/27/2017						0.0054 (J)	0.0092 (J)		
6/28/2017								0.003 (J)	
6/30/2017					0.0081 (J)				0.0076 (J)
7/11/2017	0.0183		0.0233						
7/13/2017		0.0839							
7/17/2017				0.06					
10/10/2017			0.0207						
10/11/2017		0.078							
10/12/2017	0.0205								
10/16/2017				0.0542					
2/19/2018				0.0533					
3/27/2018					<0.01		<0.01		<0.01
3/28/2018								<0.01	
3/29/2018						<0.01			
4/2/2018			0.022						
4/4/2018	0.024	0.074							
6/5/2018						0.0069 (J)			
6/6/2018							0.0082 (J)		
6/7/2018								0.0037 (J)	
6/8/2018					0.007 (J)				
6/11/2018									0.007 (J)
8/6/2018				0.044					
9/19/2018			0.023						
9/20/2018	0.035	0.074							
10/1/2018					0.007 (J)	0.0062 (J)	0.0084 (J)	0.0038 (J)	
10/2/2018									0.0069 (J)
2/25/2019				0.045					
2/26/2019					0.0067 (J)				0.007 (J)
2/27/2019						0.0074 (J)	0.008 (J)	0.0035 (J)	
3/28/2019						0.0082 (J)	0.0082 (J)		
3/29/2019					0.0066 (J)			0.0039 (J)	
4/1/2019									0.0072 (J)
6/12/2019				0.063					
8/19/2019				0.065					
8/20/2019			0.024						
8/21/2019	0.03								
9/24/2019						0.0072 (J)	0.0086 (J)	0.0038 (J)	
9/25/2019					0.0071 (J)				0.0066 (J)
9/26/2019		0.065							
10/8/2019			0.025	0.058					
10/9/2019	0.04								
2/10/2020						0.0066 (J)	0.0091 (J)		
2/11/2020								0.0036 (J)	
2/12/2020					0.007 (J)				0.0073 (J)
3/17/2020			0.035	0.047					
3/18/2020					0.0076 (J)		0.0084 (J)		
3/19/2020						0.0076 (J)		0.0036 (J)	0.0074 (J)
3/25/2020	0.033	0.071							
8/26/2020				0.044					

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/27/2020			0.027						
9/22/2020			0.026	0.045					
9/23/2020						0.0068 (J)	0.0079 (J)	0.0039 (J)	
9/24/2020		0.066							0.0062 (J)
9/25/2020	0.046				0.0073 (J)				
2/9/2021	0.041	0.071							
2/10/2021					0.0078 (J)			0.0032 (J)	
2/11/2021									0.0077 (J)
2/12/2021						0.0057 (J)	0.009 (J)		
3/1/2021			0.029						0.007
3/2/2021				0.039	0.0076				
3/3/2021						0.0068	0.0094	0.0041 (J)	
3/4/2021	0.039	0.069							

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		0.0038				
6/2/2016	0.01					
6/8/2016					0.02	
7/25/2016		0.0031 (J)				
7/26/2016	0.0088 (J)					
8/1/2016					0.02	
9/2/2016						0.0409
9/14/2016		0.0027 (J)				
9/15/2016	0.009 (J)					
9/20/2016					0.0203	
11/1/2016	0.0079 (J)	0.0027 (J)				
11/8/2016					0.0191	
11/14/2016						0.0182
1/11/2017	0.0075 (J)	0.0036 (J)				
1/17/2017					0.0192	
2/28/2017						0.023
3/1/2017		0.0036 (J)				
3/2/2017	0.009 (J)					
3/8/2017					0.0189	
4/26/2017	0.0078 (J)	0.0038 (J)				
5/2/2017					0.019	
5/9/2017						0.0349
6/28/2017	0.0071 (J)	0.004 (J)				
7/7/2017					0.019	
7/13/2017						0.0484
9/22/2017						0.0491
9/29/2017						0.0452
10/6/2017						0.0508
10/12/2017				0.064		
11/21/2017				0.0579		
1/11/2018				0.0549		
2/20/2018				0.0593		
3/28/2018	<0.01	<0.01				
3/30/2018					0.02	0.043
4/3/2018				0.051		
6/7/2018	0.0068 (J)					
6/8/2018		0.0034 (J)				
6/12/2018					0.018	
6/13/2018						0.046
6/29/2018				0.054		
8/6/2018				0.048		
9/24/2018				0.047		
9/26/2018					0.019	0.048
10/1/2018	0.0065 (J)	0.0034 (J)				
10/16/2018			0.063			
2/27/2019	0.0059 (J)	0.0034 (J)				
3/5/2019					0.019	
3/6/2019						0.041
4/1/2019	0.0064 (J)	0.003 (J)				
4/4/2019					0.02	0.042
9/25/2019	0.0059 (J)	0.005 (J)				
9/26/2019			0.039		0.017	0.025

Time Series

Constituent: Barium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/11/2020		0.0031 (J)				
2/12/2020	0.0062 (J)					
3/19/2020	0.0072 (J)	0.0029 (J)				
3/25/2020			0.039			0.025
3/26/2020					0.019	
9/23/2020	0.0051 (J)	0.0039 (J)			0.026	
9/24/2020			0.034			
9/25/2020				0.034		
10/7/2020						0.04
2/9/2021				0.036	0.031	
2/10/2021	0.0059 (J)	0.0029 (J)	0.032			0.035
3/3/2021	0.0064	0.0031 (J)			0.025	
3/4/2021			0.033	0.036		0.028

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.0005	<0.0005		
6/7/2016					<0.0005			<0.0005	<0.0005
7/27/2016					<0.0005	<0.0005	<0.0005	<0.0005	
7/28/2016									<0.0005
9/16/2016					<0.0005		<0.0005		
9/19/2016						<0.0005		<0.0005	<0.0005
11/2/2016								<0.0005	
11/3/2016					<0.0005	<0.0005	<0.0005		<0.0005
1/11/2017					<0.0005	<0.0005	<0.0005		
1/13/2017								<0.0005	<0.0005
3/1/2017						<0.0005	<0.0005		
3/2/2017					8E-05 (J)				
3/6/2017								<0.0005	<0.0005
4/26/2017						<0.0005	<0.0005	<0.0005	<0.0005
5/2/2017					<0.0005				
6/28/2017						<0.0005	<0.0005		
6/29/2017					<0.0005			<0.0005	<0.0005
3/28/2018					<0.0005	<0.0005	<0.0005		
3/29/2018								<0.0005	<0.0005
6/5/2018									<0.0005
6/6/2018								8E-05 (J)	
6/7/2018						<0.0005			
6/11/2018					9E-05 (J)		5.7E-05 (J)		
9/25/2018					8.9E-05 (J)	<0.0005	8.2E-05 (J)	6.1E-05 (J)	<0.0005
10/16/2018	<0.0005								
3/5/2019					9.1E-05 (J)		7.9E-05 (J)	0.00011 (J)	<0.0005
3/6/2019						<0.0005			
4/2/2019					9E-05 (J)				<0.0005
4/3/2019						<0.0005	7.5E-05 (J)	6.4E-05 (J)	
9/24/2019									<0.0005
9/25/2019					8.1E-05 (J)			<0.0005	
9/26/2019	<0.0005					<0.0005	8.4E-05 (J)		
1/15/2020				0.00017 (J)					
2/11/2020					7.8E-05 (J)	<0.0005	7.6E-05 (J)		
2/12/2020								7.8E-05 (J)	<0.0005
3/24/2020					8E-05 (J)	<0.0005	8.9E-05 (J)	7.6E-05 (J)	<0.0005
3/25/2020	0.00037 (J)								
9/23/2020		<0.0005	<0.0005		8.1E-05 (J)	<0.0005	8.8E-05 (J)		
9/24/2020	5.8E-05 (J)			8.6E-05 (J)				8.3E-05 (J)	<0.0005
2/9/2021	<0.0005	5.1E-05 (J)	<0.0005	0.00015 (J)		<0.0005	9.8E-05 (J)	6.8E-05 (J)	<0.0005
3/3/2021	<0.0005	<0.0005	<0.0005		9.9E-05 (J)	<0.0005	0.00011 (J)	6.8E-05 (J)	
3/4/2021				0.00013 (J)					<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.0005	<0.0005	<0.0005				
6/7/2016						<0.0005			
7/26/2016			<0.0005	<0.0005	<0.0005				
7/28/2016						<0.0005			
8/30/2016									9E-05 (J)
9/14/2016			<0.0005	<0.0005	<0.0005				
9/20/2016						0.0001 (J)			
11/2/2016			<0.0005	<0.0005					
11/4/2016					<0.0005				
11/8/2016						<0.0005			
11/16/2016									<0.0005
1/12/2017				<0.0005	<0.0005				
1/13/2017			<0.0005						
1/16/2017						0.0001 (J)			
2/27/2017									<0.0005
3/6/2017			<0.0005						
3/7/2017				<0.0005	<0.0005				
3/9/2017						0.0001 (J)			
5/1/2017			<0.0005	<0.0005					
5/2/2017					<0.0005	9E-05 (J)			
5/10/2017									9E-05 (J)
6/27/2017				<0.0005	<0.0005				
6/29/2017			<0.0005						
7/10/2017						<0.0005			
7/11/2017									0.0001 (J)
10/11/2017	<0.0005								
10/12/2017		0.0002 (J)					0.0057	0.0036	<0.0005
11/20/2017	<0.0005	0.0003 (J)					0.0053		
11/21/2017								0.0036	
1/10/2018		0.0003 (J)							
1/11/2018	<0.0005							0.0037	
1/12/2018							0.0053		
2/19/2018		<0.0005						0.0039	
2/20/2018	<0.0005						0.0053		
3/29/2018			<0.0005	<0.0005	<0.0005				
3/30/2018						<0.0005			
4/3/2018	<0.0005	<0.0005					0.0056	0.0037	
4/4/2018									<0.0005
6/6/2018				<0.0005					
6/7/2018			<0.0005		<0.0005				
6/12/2018						8.1E-05 (J)			
6/27/2018								0.0038	
6/28/2018	<0.0005	0.00029 (J)					0.0059		
8/7/2018	<0.0005	0.00024 (J)					0.0058	0.0037	
9/20/2018									<0.0005
9/24/2018	<0.0005	0.00019 (J)					0.0051	0.0032	
9/26/2018			<0.0005	<0.0005	<0.0005				
9/27/2018						9E-05 (J)			
3/4/2019			<0.0005	<0.0005	<0.0005				
3/6/2019						6.6E-05 (J)			
4/3/2019			<0.0005	<0.0005	<0.0005				
4/4/2019						7.2E-05 (J)			

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Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	<0.0005	0.0002 (J)							
8/22/2019							0.0049	0.0026 (J)	<0.0005
9/24/2019				<0.0005	<0.0005				
9/25/2019			<0.0005						
9/27/2019						7.7E-05 (J)			
10/9/2019	<0.0005	0.0002 (J)					0.0046	0.0026 (J)	<0.0005
2/12/2020	<0.0005	0.00018 (J)	<0.0005	<0.0005	<0.0005				
3/24/2020		0.00022 (J)		<0.0005	<0.0005				
3/25/2020	<0.0005		<0.0005				0.0038	0.0026 (J)	<0.0005
3/26/2020						9E-05 (J)			
9/22/2020			<0.0005	<0.0005	<0.0005				
9/24/2020	<0.0005	0.0002 (J)				0.00015 (J)			6.7E-05 (J)
9/25/2020							0.0033	0.002 (J)	
2/8/2021				<0.0005	<0.0005				
2/9/2021			<0.0005			0.00015 (J)	0.0029 (J)		
2/10/2021	5.1E-05 (J)	0.00021 (J)						0.0015 (J)	5.7E-05 (J)
3/2/2021				<0.0005	<0.0005				
3/3/2021			<0.0005						
3/4/2021	<0.0005	0.00021 (J)				0.00013 (J)	0.0029	0.0015	<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.0005
7/26/2016					0.0002 (J)	<0.0005			
8/30/2016			<0.0005						
8/31/2016	<0.0005			<0.0005					
9/1/2016		0.0001 (J)							
9/13/2016						<0.0005	<0.0005		
9/14/2016								<0.0005	
9/15/2016					0.0002 (J)				
9/19/2016									<0.0005
11/1/2016						<0.0005			<0.0005
11/2/2016					0.0002 (J)				
11/4/2016							<0.0005	<0.0005	
11/14/2016			<0.0005						
11/15/2016		0.0001 (J)							
11/16/2016	<0.0005								
11/28/2016				<0.0005					
12/15/2016								<0.0005	
1/10/2017					0.0002 (J)				
1/11/2017						<0.0005			
1/16/2017							<0.0005	<0.0005	<0.0005
2/21/2017									<0.0005
2/22/2017				<0.0005					
2/24/2017	<0.0005		<0.0005						
2/27/2017		0.0001 (J)							
3/2/2017						<0.0005	<0.0005		
3/3/2017								<0.0005	
3/8/2017					0.0002 (J)				
4/26/2017					0.0002 (J)				<0.0005
4/27/2017						<0.0005	<0.0005		
4/28/2017								<0.0005	
5/8/2017			7E-05 (J)	<0.0005					

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Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		0.0001 (J)							
5/10/2017	<0.0005								
5/26/2017								<0.0005	
6/27/2017						<0.0005	<0.0005		
6/28/2017								<0.0005	
6/30/2017					0.0002 (J)				<0.0005
7/11/2017	<0.0005		<0.0005						
7/13/2017		0.0001 (J)							
7/17/2017				<0.0005					
10/10/2017			<0.0005						
10/11/2017		0.0001 (J)							
10/12/2017	0.0001 (J)								
10/16/2017				<0.0005					
2/19/2018				<0.0005					
3/27/2018					<0.0005		<0.0005		<0.0005
3/28/2018								<0.0005	
3/29/2018						<0.0005			
4/2/2018			<0.0005						
4/4/2018	<0.0005	<0.0005							
8/6/2018				<0.0005					
9/19/2018			5.7E-05 (J)						
9/20/2018	0.00029 (J)	0.00011 (J)							
2/25/2019				<0.0005					
2/26/2019					0.00016 (J)				7.2E-05 (J)
2/27/2019						<0.0005	<0.0005	<0.0005	
3/28/2019						<0.0005	<0.0005		
3/29/2019					0.00017 (J)			<0.0005	
4/1/2019									<0.0005
6/12/2019				<0.0005					
8/19/2019				<0.0005					
8/20/2019			<0.0005						
8/21/2019	0.0003 (J)								
9/24/2019						<0.0005	<0.0005	<0.0005	
9/25/2019					0.00018 (J)				<0.0005
9/26/2019		0.00013 (J)							
10/8/2019				<0.0005					
10/9/2019	0.00034 (J)								
2/10/2020						<0.0005	<0.0005		
2/11/2020								<0.0005	
2/12/2020					0.00019 (J)				<0.0005
3/17/2020				<0.0005					
3/18/2020					0.00021 (J)		<0.0005		
3/19/2020						<0.0005		<0.0005	<0.0005
3/25/2020	0.00034 (J)	0.00013 (J)							
8/26/2020				<0.0005					
8/27/2020			4.7E-05 (J)						
9/22/2020			<0.0005	<0.0005					
9/23/2020						<0.0005	<0.0005	<0.0005	
9/24/2020		0.00013 (J)							<0.0005
9/25/2020	0.00054 (J)				0.00018 (J)				
2/9/2021	0.00053 (J)	0.00013 (J)							
2/10/2021					0.00019 (J)			<0.0005	

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Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
2/11/2021									4.7E-05 (J)
2/12/2021						<0.0005	<0.0005		
3/1/2021			5.5E-05 (J)						<0.0005
3/2/2021				<0.0005	0.00018 (J)				
3/3/2021						<0.0005	<0.0005	<0.0005	
3/4/2021	0.00056	0.0001 (J)							

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Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.0005				
6/2/2016	<0.0005					
6/8/2016					<0.0005	
7/25/2016		<0.0005				
7/26/2016	<0.0005					
8/1/2016					0.0001 (J)	
9/2/2016						0.0003 (J)
9/14/2016		<0.0005				
9/15/2016	<0.0005					
9/20/2016					0.0001 (J)	
11/1/2016	<0.0005	<0.0005				
11/8/2016					<0.0005	
11/14/2016						9E-05 (J)
1/11/2017	<0.0005	<0.0005				
1/17/2017					0.0001 (J)	
2/28/2017						0.0001 (J)
3/1/2017		<0.0005				
3/2/2017	<0.0005					
3/8/2017					0.0001 (J)	
4/26/2017	<0.0005	<0.0005				
5/2/2017					0.0001 (J)	
5/9/2017						0.0002 (J)
6/28/2017	<0.0005	<0.0005				
7/7/2017					0.0001 (J)	
7/13/2017						0.0003 (J)
9/22/2017						0.0003 (J)
9/29/2017						0.0003 (J)
10/6/2017						0.0003 (J)
10/12/2017				0.0004 (J)		
11/21/2017				0.0004 (J)		
1/11/2018				0.0003 (J)		
2/20/2018				<0.0005		
3/28/2018	<0.0005	<0.0005				
3/30/2018					<0.0005	<0.0005
4/3/2018				<0.0005		
6/12/2018					0.00012 (J)	
6/13/2018						0.00035 (J)
6/29/2018				0.00033 (J)		
8/6/2018				0.0002 (J)		
8/30/2018			0.00052 (J)			
9/24/2018				0.00029 (J)		
9/26/2018					0.00014 (J)	0.00032 (J)
10/16/2018			0.00036 (J)			
2/27/2019	<0.0005	<0.0005				
3/5/2019					0.00016 (J)	
3/6/2019						0.00029 (J)
4/1/2019	<0.0005	<0.0005				
4/4/2019					0.00015 (J)	0.00033 (J)
9/25/2019	<0.0005	<0.0005				
9/26/2019			<0.0005		0.00014 (J)	0.00029 (J)
2/11/2020		<0.0005				
2/12/2020	<0.0005					

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Constituent: Beryllium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/19/2020	<0.0005	<0.0005				
3/25/2020			<0.0005			0.00022 (J)
3/26/2020					0.00016 (J)	
9/23/2020	<0.0005	5.9E-05 (J)			6.1E-05 (J)	
9/24/2020			0.00033 (J)			
9/25/2020				0.00031 (J)		
10/7/2020						0.00014 (J)
2/9/2021				0.00029 (J)	0.00013 (J)	
2/10/2021	<0.0005	<0.0005	0.00025 (J)			9.9E-05 (J)
3/3/2021	<0.0005	<0.0005			9.9E-05 (J)	
3/4/2021			0.00025 (J)	0.00017 (J)		0.00016 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.04	<0.04		
6/7/2016					<0.04			<0.04	<0.04
7/27/2016					0.008 (J)	<0.04	0.0059 (J)	<0.04	
7/28/2016									<0.04
9/16/2016					0.0086 (J)		0.0079 (J)		
9/19/2016						<0.04		<0.04	<0.04
11/2/2016								<0.04	
11/3/2016					0.0077 (J)	<0.04	0.0082 (J)		<0.04
1/11/2017					0.0092 (J)	<0.04	0.0096 (J)		
1/13/2017								<0.04	<0.04
3/1/2017						<0.04	<0.04		
3/2/2017					0.0095 (J)				
3/6/2017								<0.04	<0.04
4/26/2017						<0.04	0.0091 (J)	<0.04	<0.04
5/2/2017					<0.04				
6/28/2017						<0.04	0.0079 (J)		
6/29/2017					0.0074 (J)			<0.04	<0.04
10/3/2017									<0.04
10/4/2017					0.0077 (J)		0.009 (J)	<0.04	
10/5/2017						<0.04			
6/5/2018									0.0092 (J)
6/6/2018								0.0049 (J)	
6/7/2018						<0.04			
6/11/2018					0.01 (J)		0.0093 (J)		
9/25/2018					0.0096 (J)	0.0046 (J)	0.007 (J)	<0.04	0.0054 (J)
10/16/2018	0.2								
4/2/2019					0.0066 (J)				0.011 (J)
4/3/2019						<0.04	0.0053 (J)	<0.04	
9/24/2019									0.018 (J)
9/25/2019					0.0081 (J)			<0.04	
9/26/2019	0.092					0.0062 (J)	0.0072 (J)		
1/15/2020		0.031 (J)		8.7					
1/16/2020			1.9						
2/11/2020				7.8					
3/24/2020					0.0092 (J)	0.0054 (J)	0.01 (J)	<0.04	0.016 (J)
3/25/2020	0.018 (J)								
9/23/2020		0.026 (J)	2.5		0.0066 (J)	0.021 (J)	0.006 (J)		
9/24/2020	0.076 (J)			8.7				0.0094 (J)	0.013 (J)
3/3/2021	0.039 (J)	0.032 (J)	0.81		0.01 (J)	<0.04	0.0094 (J)	<0.04	
3/4/2021				6.1					0.0079 (J)

Time Series

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.04	<0.04	<0.04				
6/7/2016						0.99			
7/26/2016			0.0047 (J)	0.0052 (J)	<0.04				
7/28/2016						1.09			
8/30/2016									24.7
9/14/2016			<0.04	0.0071 (J)	0.01 (J)				
9/20/2016						1.35			
11/2/2016			<0.04	<0.04					
11/4/2016					<0.04				
11/8/2016						1.5			
11/16/2016									16.4
1/12/2017				0.0076 (J)	<0.04				
1/13/2017			<0.04						
1/16/2017						1.67			
2/27/2017									17.9
3/6/2017			<0.04						
3/7/2017				0.0089 (J)	<0.04				
3/9/2017						1.44			
5/1/2017			<0.04	0.0061 (J)					
5/2/2017					<0.04	1.2			
5/10/2017									20.4
6/27/2017				0.0079 (J)	<0.04				
6/29/2017			<0.04						
7/10/2017						1.12			
7/11/2017									25.2
10/3/2017				0.0094 (J)	<0.04				
10/5/2017			<0.04						
10/11/2017	0.0135 (J)					1.09			
10/12/2017		0.0401					19.3	12	20
11/20/2017	0.0251 (J)	0.156					21.8		
11/21/2017								12.1	
1/10/2018		0.15							
1/11/2018	0.0255 (J)							12.8	
1/12/2018							18.7		
2/19/2018		0.146						15.2	
2/20/2018	<0.04						18.6		
4/3/2018	0.033 (J)	0.12					20.9	14.5	
4/4/2018									22.7
6/6/2018				0.0098 (J)					
6/7/2018			0.0045 (J)		<0.04				
6/12/2018						0.9			
6/27/2018								14.1	
6/28/2018	0.053	0.16					22.7		
8/7/2018	0.024 (J)	0.12					19.1	11.9	
9/20/2018									20.3
9/24/2018	0.028 (J)	0.099					18.4	12.2	
9/26/2018			0.005 (J)	0.01 (J)	0.0057 (J)				
9/27/2018						0.71			
3/26/2019		0.096							
3/27/2019	0.017 (J)						16.7		20.3
3/28/2019								7.1	
4/3/2019			0.0055 (J)	0.0076 (J)	0.0044 (J)				

Time Series

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						0.6			
9/24/2019				0.01 (J)	0.0049 (J)				
9/25/2019			<0.04						
9/27/2019						0.58			
10/9/2019	0.017 (J)	0.079					13.5	8.6	16.6
3/24/2020		0.088 (J)		0.011 (J)	0.0068 (J)				
3/25/2020	0.043 (J)		0.011 (J)				9.3	7.9	15.5
3/26/2020						0.94			
9/22/2020			<0.04	0.0079 (J)	0.0053 (J)				
9/24/2020	0.037 (J)	0.087 (J)				1.1			15.2
9/25/2020							8	6	
3/2/2021				0.0068 (J)	0.011 (J)				
3/3/2021			0.0056 (J)						
3/4/2021	0.033 (J)	0.078				1.2	6.4	4	14.8

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Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						<0.04	<0.04		
6/2/2016					<0.04				<0.04
7/25/2016							<0.04		<0.04
7/26/2016					0.0177 (J)	0.0055 (J)			
8/30/2016			0.0166 (J)						
8/31/2016	0.169			0.0315 (J)					
9/1/2016		0.0113 (J)							
9/13/2016						<0.04	<0.04		
9/14/2016								<0.04	
9/15/2016					0.0214 (J)				
9/19/2016									<0.04
11/1/2016						0.0086 (J)			<0.04
11/2/2016					<0.04				
11/4/2016							<0.04	<0.04	
11/14/2016			0.0166 (J)						
11/15/2016		0.0074 (J)							
11/16/2016	0.406								
11/28/2016				0.0095 (J)					
12/15/2016								0.0107 (J)	
1/10/2017					0.0198 (J)				
1/11/2017						0.0074 (J)			
1/16/2017							<0.04	<0.04	<0.04
2/21/2017									<0.04
2/22/2017				<0.04					
2/24/2017	0.725		0.0145 (J)						
2/27/2017		<0.04							
3/2/2017						0.008 (J)	<0.04		
3/3/2017								<0.04	
3/8/2017					0.0189 (J)				
4/26/2017					0.0161 (J)				<0.04
4/27/2017						0.0066 (J)	<0.04		
4/28/2017								<0.04	
5/8/2017			0.0141 (J)	0.0084 (J)					
5/9/2017		<0.04							
5/10/2017	0.955								
5/26/2017								<0.04	
6/27/2017						0.0087 (J)	0.006 (J)		
6/28/2017								<0.04	
6/30/2017					0.0173 (J)				<0.04
7/11/2017	0.994		0.0131 (J)						
7/13/2017		0.0093 (J)							
7/17/2017				0.0092 (J)					
10/3/2017						0.0072 (J)	0.0071 (J)	<0.04	
10/4/2017									<0.04
10/5/2017					0.0173 (J)				
10/10/2017			0.0124 (J)						
10/11/2017		<0.04							
10/12/2017	1.15								
10/16/2017				<0.04					
2/19/2018				<0.04					
4/2/2018			0.013 (J)						
4/4/2018	1.2	0.0041 (J)							

Time Series

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						0.0052 (J)			
6/6/2018							<0.04		
6/7/2018								<0.04	
6/8/2018					0.013 (J)				
6/11/2018									0.014 (J)
8/6/2018				<0.04					
9/19/2018			0.012 (J)						
9/20/2018	2.1	0.0042 (J)							
10/1/2018					0.015 (J)	0.021 (J)	0.0049 (J)	<0.04	
10/2/2018									<0.04
2/25/2019				<0.04					
3/27/2019			0.013 (J)						
3/28/2019	1.8	<0.04				0.005 (J)	<0.04		
3/29/2019					0.014 (J)			0.0065 (J)	
4/1/2019									<0.04
6/12/2019				<0.04					
9/24/2019						0.0064 (J)	0.0055 (J)	0.0076 (J)	
9/25/2019					0.018 (J)				<0.04
9/26/2019		<0.04							
10/8/2019			0.012 (J)	<0.04					
10/9/2019	2.7								
3/17/2020			0.023 (J)	0.0051 (J)					
3/18/2020					0.02 (J)		0.0087 (J)		
3/19/2020						0.0085 (J)		0.0073 (J)	0.0052 (J)
3/25/2020	2.4	0.012 (J)							
9/22/2020			0.0076 (J)	0.0079 (J)					
9/23/2020						<0.04	<0.04	<0.04	
9/24/2020		0.062 (J)							0.0075 (J)
9/25/2020	3.9				0.02 (J)				
3/1/2021			0.013 (J)						<0.04
3/2/2021				<0.04	0.017 (J)				
3/3/2021						<0.04	<0.04	<0.04	
3/4/2021	3.6	<0.04							

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Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.04				
6/2/2016	<0.04					
6/8/2016					<0.04	
7/25/2016		<0.04				
7/26/2016	0.0097 (J)					
8/1/2016					<0.04	
9/2/2016						0.133
9/14/2016		<0.04				
9/15/2016	0.0102 (J)					
9/20/2016					<0.04	
11/1/2016	<0.04	<0.04				
11/8/2016					<0.04	
11/14/2016						0.287
1/11/2017	<0.04	<0.04				
1/17/2017					<0.04	
2/28/2017						0.215
3/1/2017		<0.04				
3/2/2017	0.0084 (J)					
3/8/2017					<0.04	
4/26/2017	<0.04	<0.04				
5/2/2017					0.0099 (J)	
5/9/2017						0.233
6/28/2017	<0.04	<0.04				
7/7/2017					0.0076 (J)	
7/13/2017						0.262
9/22/2017						0.238
9/29/2017						0.235
10/4/2017	<0.04	<0.04				
10/5/2017					<0.04	
10/6/2017						0.256
10/11/2017						0.245
10/12/2017				15.4		
11/21/2017				17.2		
1/11/2018				15.8		
2/20/2018				19.5		
4/3/2018				17.5		
6/7/2018	0.004 (J)					
6/8/2018		<0.04				
6/12/2018					0.018 (J)	
6/13/2018						0.25
6/29/2018				20.6		
8/6/2018				15.9		
8/30/2018			0.04			
9/24/2018				16.5		
9/26/2018					0.0055 (J)	0.24
10/1/2018	<0.04	<0.04				
10/16/2018			0.031 (J)			
4/1/2019	<0.04	<0.04				
4/4/2019					<0.04	0.22
9/25/2019	0.0054 (J)	<0.04				
9/26/2019			<0.04		0.0068 (J)	0.13
3/19/2020	0.0073 (J)	0.0053 (J)				

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Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/25/2020			0.071 (J)			0.11
3/26/2020					0.033 (J)	
9/23/2020	0.012 (J)	0.0073 (J)			<0.04	
9/24/2020			0.017 (J)			
9/25/2020				14.1		
10/7/2020						0.018 (J)
3/3/2021	<0.04	<0.04			<0.04	
3/4/2021			0.012 (J)	12.4		0.0088 (J)

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Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.0005	<0.0005		
6/7/2016					<0.0005			<0.0005	<0.0005
7/27/2016					<0.0005	<0.0005	<0.0005	<0.0005	
7/28/2016									<0.0005
9/16/2016					<0.0005		<0.0005		
9/19/2016						<0.0005		<0.0005	<0.0005
11/2/2016								<0.0005	
11/3/2016					<0.0005	<0.0005	<0.0005		<0.0005
1/11/2017					0.0001 (J)	<0.0005	0.0001 (J)		
1/13/2017								<0.0005	<0.0005
3/1/2017						<0.0005	<0.0005		
3/2/2017					<0.0005				
3/6/2017								<0.0005	<0.0005
4/26/2017						<0.0005	<0.0005	<0.0005	<0.0005
5/2/2017					<0.0005				
6/28/2017						<0.0005	<0.0005		
6/29/2017					<0.0005			<0.0005	<0.0005
3/28/2018					<0.0005	<0.0005	<0.0005		
3/29/2018								<0.0005	<0.0005
6/5/2018									<0.0005
6/6/2018								<0.0005	
6/7/2018						<0.0005			
6/11/2018					<0.0005		<0.0005		
9/25/2018					<0.0005	<0.0005	<0.0005	<0.0005	9.6E-05 (J)
10/16/2018	0.00014 (J)								
3/5/2019					<0.0005		<0.0005	<0.0005	<0.0005
3/6/2019						<0.0005			
4/2/2019					<0.0005				<0.0005
4/3/2019						<0.0005	<0.0005	<0.0005	
9/24/2019									<0.0005
9/25/2019					<0.0005			<0.0005	
9/26/2019	<0.0005					<0.0005	<0.0005		
2/11/2020					<0.0005	<0.0005	<0.0005		
2/12/2020								<0.0005	<0.0005
3/24/2020					<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/25/2020	<0.0005								
9/23/2020		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		
9/24/2020	0.00017 (J)			0.00018 (J)				<0.0005	<0.0005
2/9/2021	0.00013 (J)	<0.0005	<0.0005	0.00025 (J)		<0.0005	<0.0005	<0.0005	0.00041 (J)
3/3/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	
3/4/2021				0.00018 (J)					<0.0005

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Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.0005	<0.0005	<0.0005				
6/7/2016						<0.0005			
7/26/2016			<0.0005	<0.0005	<0.0005				
7/28/2016						<0.0005			
8/30/2016									<0.0005
9/14/2016			<0.0005	<0.0005	<0.0005				
9/20/2016						<0.0005			
11/2/2016			<0.0005	<0.0005					
11/4/2016					<0.0005				
11/8/2016						7E-05 (J)			
11/16/2016									<0.0005
1/12/2017				<0.0005	9E-05 (J)				
1/13/2017			<0.0005						
1/16/2017						<0.0005			
2/27/2017									<0.0005
3/6/2017			<0.0005						
3/7/2017				<0.0005	<0.0005				
3/9/2017						<0.0005			
5/1/2017			<0.0005	<0.0005					
5/2/2017					<0.0005	<0.0005			
5/10/2017									0.0002 (J)
6/27/2017				<0.0005	<0.0005				
6/29/2017			<0.0005						
7/10/2017						<0.0005			
7/11/2017									0.0005 (J)
10/11/2017	<0.0005								
10/12/2017		<0.0005					0.003	0.0002 (J)	0.0006 (J)
11/20/2017	<0.0005	<0.0005					0.0027		
11/21/2017								0.0003 (J)	
1/10/2018		<0.0005							
1/11/2018	<0.0005							0.0002 (J)	
1/12/2018							0.0029		
2/19/2018		<0.0005						<0.0005	
2/20/2018	<0.0005						0.0029		
3/29/2018			<0.0005	<0.0005	<0.0005				
3/30/2018						<0.0005			
4/3/2018	<0.0005	<0.0005					0.0027	<0.0005	
4/4/2018									<0.0005
6/6/2018				<0.0005					
6/7/2018			<0.0005		<0.0005				
6/12/2018						<0.0005			
6/27/2018								0.00025 (J)	
6/28/2018	<0.0005	<0.0005					0.0029		
8/7/2018	<0.0005	<0.0005					0.0027	0.00024 (J)	
9/20/2018									0.0002 (J)
9/24/2018	<0.0005	<0.0005					0.0027	0.00021 (J)	
9/26/2018			<0.0005	<0.0005	<0.0005				
9/27/2018						<0.0005			
3/4/2019			<0.0005	<0.0005	<0.0005				
3/6/2019						<0.0005			
4/3/2019			<0.0005	<0.0005	<0.0005				
4/4/2019						<0.0005			

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Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	<0.0005	<0.0005							
8/22/2019							0.0023 (J)	0.00015 (J)	0.00017 (J)
9/24/2019				<0.0005	<0.0005				
9/25/2019			<0.0005						
9/27/2019						<0.0005			
10/9/2019	<0.0005	<0.0005					0.0021 (J)	0.00017 (J)	0.00025 (J)
2/12/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
3/24/2020		<0.0005		<0.0005	<0.0005				
3/25/2020	<0.0005		<0.0005				0.0018 (J)	0.00018 (J)	0.00021 (J)
3/26/2020						<0.0005			
9/22/2020			<0.0005	<0.0005	<0.0005				
9/24/2020	<0.0005	<0.0005				<0.0005			0.00014 (J)
9/25/2020							0.0015 (J)	0.00014 (J)	
2/8/2021				<0.0005	<0.0005				
2/9/2021			<0.0005			<0.0005	0.0014 (J)		
2/10/2021	0.00019 (J)	<0.0005						<0.0005	<0.0005
3/2/2021				<0.0005	<0.0005				
3/3/2021			<0.0005						
3/4/2021	0.0003 (J)	<0.0005				<0.0005	0.0013	<0.0005	<0.0005

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Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.0005
7/26/2016					<0.0005	<0.0005			
8/30/2016			0.0001 (J)						
8/31/2016	<0.0005			<0.0005					
9/1/2016		<0.0005							
9/13/2016						<0.0005	<0.0005		
9/14/2016								<0.0005	
9/15/2016					<0.0005				
9/19/2016									<0.0005
11/1/2016						<0.0005			<0.0005
11/2/2016					<0.0005				
11/4/2016							<0.0005	<0.0005	
11/14/2016			0.0001 (J)						
11/15/2016		<0.0005							
11/16/2016	<0.0005								
11/28/2016				<0.0005					
12/15/2016								<0.0005	
1/10/2017					<0.0005				
1/11/2017						0.0002 (J)			
1/16/2017							<0.0005	<0.0005	<0.0005
2/21/2017									<0.0005
2/22/2017				<0.0005					
2/24/2017	<0.0005		9E-05 (J)						
2/27/2017		7E-05 (J)							
3/2/2017						<0.0005	<0.0005		
3/3/2017								<0.0005	
3/8/2017					7E-05 (J)				
4/26/2017					<0.0005				<0.0005
4/27/2017						<0.0005	<0.0005		
4/28/2017								<0.0005	
5/8/2017			0.0001 (J)	<0.0005					

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.0005							
5/10/2017	<0.0005								
5/26/2017								<0.0005	
6/27/2017						<0.0005	<0.0005		
6/28/2017								<0.0005	
6/30/2017					<0.0005				<0.0005
7/11/2017	<0.0005		<0.0005						
7/13/2017		<0.0005							
7/17/2017				<0.0005					
10/10/2017			<0.0005						
10/11/2017		<0.0005							
10/12/2017	<0.0005								
10/16/2017				<0.0005					
2/19/2018				<0.0005					
3/27/2018					<0.0005		<0.0005		<0.0005
3/28/2018								<0.0005	
3/29/2018						<0.0005			
4/2/2018			<0.0005						
4/4/2018	<0.0005	<0.0005							
8/6/2018				<0.0005					
9/19/2018			<0.0005						
9/20/2018	<0.0005	<0.0005							
2/25/2019				<0.0005					
2/26/2019					<0.0005				<0.0005
2/27/2019						<0.0005	<0.0005	<0.0005	
3/28/2019						<0.0005	<0.0005		
3/29/2019					<0.0005			<0.0005	
4/1/2019									<0.0005
6/12/2019				<0.0005					
8/19/2019				<0.0005					
8/20/2019			<0.0005						
8/21/2019	<0.0005								
9/24/2019						<0.0005	<0.0005	<0.0005	
9/25/2019					<0.0005				<0.0005
9/26/2019		<0.0005							
10/8/2019			<0.0005	<0.0005					
10/9/2019	<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	<0.0005					
3/18/2020					<0.0005		<0.0005		
3/19/2020						<0.0005		<0.0005	<0.0005
3/25/2020	<0.0005	<0.0005							
8/26/2020				<0.0005					
8/27/2020			<0.0005						
9/22/2020				<0.0005					
9/23/2020						<0.0005	<0.0005	<0.0005	
9/24/2020		<0.0005							<0.0005
9/25/2020	<0.0005				<0.0005				
2/9/2021	<0.0005	<0.0005							
2/10/2021					<0.0005			<0.0005	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
2/11/2021									<0.0005
2/12/2021						<0.0005	<0.0005		
3/1/2021									<0.0005
3/2/2021				<0.0005	<0.0005				
3/3/2021						<0.0005	<0.0005	<0.0005	
3/4/2021	<0.0005	<0.0005							

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.0005				
6/2/2016	<0.0005					
6/8/2016					<0.0005	
7/25/2016		<0.0005				
7/26/2016	<0.0005					
8/1/2016					<0.0005	
9/2/2016						<0.0005
9/14/2016		<0.0005				
9/15/2016	<0.0005					
9/20/2016					<0.0005	
11/1/2016	<0.0005	<0.0005				
11/8/2016					<0.0005	
11/14/2016						9E-05 (J)
1/11/2017	0.0001 (J)	8E-05 (J)				
1/17/2017					<0.0005	
2/28/2017						0.0001 (J)
3/1/2017		<0.0005				
3/2/2017	<0.0005					
3/8/2017					<0.0005	
4/26/2017	<0.0005	<0.0005				
5/2/2017					<0.0005	
5/9/2017						0.0002 (J)
6/28/2017	<0.0005	<0.0005				
7/7/2017					<0.0005	
7/13/2017						0.0002 (J)
9/22/2017						0.0002 (J)
9/29/2017						0.0002 (J)
10/6/2017						0.0002 (J)
10/12/2017				0.0002 (J)		
11/21/2017				0.0002 (J)		
1/11/2018				0.0004 (J)		
2/20/2018				<0.0005		
3/28/2018	<0.0005	<0.0005				
3/30/2018					<0.0005	<0.0005
4/3/2018				<0.0005		
6/12/2018					<0.0005	
6/13/2018						0.00019 (J)
6/29/2018				0.00099 (J)		
8/6/2018				0.00063 (J)		
9/24/2018				0.00069 (J)		
9/26/2018					<0.0005	0.00018 (J)
10/16/2018			<0.0005			
2/27/2019	<0.0005	<0.0005				
3/5/2019					<0.0005	
3/6/2019						0.00015 (J)
4/1/2019	<0.0005	<0.0005				
4/4/2019					<0.0005	0.00019 (J)
9/25/2019	<0.0005	<0.0005				
9/26/2019			<0.0005		<0.0005	0.00017 (J)
2/11/2020		<0.0005				
2/12/2020	<0.0005					
3/19/2020	<0.0005	<0.0005				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/25/2020			0.00016 (J)			0.00019 (J)
3/26/2020					<0.0005	
9/23/2020	<0.0005	<0.0005			<0.0005	
9/24/2020			<0.0005			
9/25/2020				0.00039 (J)		
10/7/2020						0.00012 (J)
2/9/2021				0.00042 (J)	<0.0005	
2/10/2021	<0.0005	<0.0005	<0.0005			<0.0005
3/3/2021	<0.0005	<0.0005			<0.0005	
3/4/2021			<0.0005	0.00028 (J)		<0.0005

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						6.2	1.4		
6/7/2016					2.2			2.3	3.7
7/27/2016					2	4.73	1.19	2.08	
7/28/2016									3.15
9/16/2016					1.97		1.5		
9/19/2016						4.76		1.97	3.17
11/2/2016								2.13	
11/3/2016					1.99	5.25	1.31		3.4
1/11/2017					2.28	4.74	1.25		
1/13/2017								2.45	4.98
3/1/2017						5.37	1.26		
3/2/2017					2.15				
3/6/2017								2.48	6.28
4/26/2017						4.28	1.05	2.3	6.65
5/2/2017					1.95				
6/28/2017						4.95	1.06		
6/29/2017					2.02			2.54	6.04
10/3/2017									8.28
10/4/2017					2.03		1.1	2.25	
10/5/2017						5.28			
6/5/2018									9.1
6/6/2018								2.3	
6/7/2018						4.8			
6/11/2018					2.1		1.4		
9/25/2018					2.1	4.6	1	2.3	10.4 (J)
10/16/2018	14.5 (J)								
4/2/2019					2.5				8.8
4/3/2019						5.3	1.2	2.9	
9/24/2019									7.7
9/25/2019					2.6			2.4	
9/26/2019	9.3					4.9	1.1		
3/24/2020					2.7	5.3	1	2.6	6
3/25/2020	4.5								
9/23/2020		1.7	10.5		2.6	5.2	0.91 (J)		
9/24/2020	4.8			61.3				2.6	7.8
3/3/2021	6.9	1.5	20.6		2.5	5.2	0.96 (J)	2.4	
3/4/2021				53.8					8.7

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			8.8	33	2.4				
6/7/2016						9.6			
7/26/2016			7.69	32.3	2.12				
7/28/2016						7.87			
8/30/2016									133
9/14/2016			8.49	31	2.18				
9/20/2016						9.28			
11/2/2016			7.83	30.9					
11/4/2016					2.17 (J)				
11/8/2016						8.6			
11/16/2016									125
1/12/2017				35.7	2.37				
1/13/2017			8.08						
1/16/2017						8.85			
2/27/2017									139
3/6/2017			8.64						
3/7/2017				32.7	2.34				
3/9/2017						8.4			
5/1/2017			13.4	37					
5/2/2017					2.17	12.9			
5/10/2017									130
6/27/2017				36.5	2.13				
6/29/2017			8.81						
7/10/2017						8.09			
7/11/2017									172
10/3/2017				30.9	2.15				
10/5/2017			9.29						
10/11/2017	2.74					6.36			
10/12/2017		2.9					190	44.5	144
11/20/2017	1.81	10.4					184		
11/21/2017								44.4	
1/10/2018		10.2							
1/11/2018	1.54							43.9	
1/12/2018							178		
2/19/2018		<25						45.3	
2/20/2018	1.71						184		
4/3/2018	1.4	6.3					174	42.7	
4/4/2018									137
6/6/2018				26.2					
6/7/2018			8.2		2.3				
6/12/2018						4.7			
6/27/2018								42.2	
6/28/2018	1.4	6.7					190		
8/7/2018	1.2	6.3					176	40.7	
9/20/2018									108
9/24/2018	1.1	5.7					172	38.5	
9/26/2018			9.5 (J)	25.8	2.3				
9/27/2018						4.1			
3/26/2019		5.6							
3/27/2019	1.5						155		109
3/28/2019								26	
4/3/2019			8.4	24.7 (J)	2.8				

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						3.7			
9/24/2019				25.8	2.5				
9/25/2019			9.5						
9/27/2019						3.7			
10/9/2019	2.4	4.9					133	27.6	92
3/24/2020		4.8		26.1	2.5				
3/25/2020	2.7		10.5				124	29.6	107
3/26/2020						5.6			
9/22/2020			9.6	27.2	2.6				
9/24/2020	3.7	4.4				7.9			84.3
9/25/2020							93.7	20.5	
3/2/2021				1.6	2.6				
3/3/2021			7.7						
3/4/2021	8.2	4.6				10.2	87	16.4	90.7

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						12	2.5		
6/2/2016					1.3				1.3
7/25/2016							2.16		1.17
7/26/2016					1.24	11			
8/30/2016			20.9						
8/31/2016	3.4			9.31					
9/1/2016		13.9							
9/13/2016						11.8	2.21		
9/14/2016								23.5	
9/15/2016					1.17				
9/19/2016									1.05
11/1/2016						11			1.14
11/2/2016					1.23				
11/4/2016							2.67	23.7	
11/14/2016			18.6						
11/15/2016		13.5							
11/16/2016	3.79								
11/28/2016				9.47 (B)					
12/15/2016								23.1	
1/10/2017					1.24				
1/11/2017						11.2			
1/16/2017							2.45	23.3	1.23
2/21/2017									1.25
2/22/2017				10.4					
2/24/2017	6.42		16.1						
2/27/2017		12.5							
3/2/2017						11	2.57		
3/3/2017								25.1	
3/8/2017					1.21				
4/26/2017					1.14				1.03
4/27/2017						11.1	2.38		
4/28/2017								30.7	
5/8/2017			14.6	14.2					
5/9/2017		14.4							
5/10/2017	7.9								
5/26/2017								26.2	
6/27/2017						13.8	2.36		
6/28/2017								26.1	
6/30/2017					1.24				1.13
7/11/2017	6.71		14.3						
7/13/2017		14.1							
7/17/2017				14.1					
10/3/2017						14	2.21	26.7	
10/4/2017									1.09
10/5/2017					1.11				
10/10/2017			12.1						
10/11/2017		12.4							
10/12/2017	7.05								
10/16/2017				13.6					
2/19/2018				<25					
4/2/2018			<25						
4/4/2018	8.6	<25							

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						15.2 (J)			
6/6/2018							2.3		
6/7/2018								25	
6/8/2018					1.1				
6/11/2018									1.1
8/6/2018				11.4 (J)					
9/19/2018			11.1 (J)						
9/20/2018	15.9 (J)	12 (J)							
10/1/2018					0.99	15.1	1.8	25	
10/2/2018									1.1
2/25/2019				12.7 (J)					
3/27/2019			10.8 (J)						
3/28/2019	8.9	11.3 (J)				13.3 (J)	2.2		
3/29/2019					1.1			23.5 (J)	
4/1/2019									1.3
6/12/2019				18.9					
9/24/2019						15.8	2.3	26.4	
9/25/2019					1.1				1.1
9/26/2019		12.1							
10/8/2019			9.7	28.3					
10/9/2019	18.2								
3/17/2020			14.8	24.3					
3/18/2020					1.1		2.1		
3/19/2020						15		27.4	1.2
3/25/2020	12.1	13.2							
9/22/2020			10.1	31					
9/23/2020						14.1	1.8	26.3	
9/24/2020		12							1.1
9/25/2020	19.8				1.3				
3/1/2021			10.3						1.2
3/2/2021				34.2	1.2				
3/3/2021						14.1	1.8	25.6	
3/4/2021	32.2	13							

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		21				
6/2/2016	28					
6/8/2016					1.9	
7/25/2016		20.3				
7/26/2016	24.5					
8/1/2016					1.83	
9/2/2016						11.2
9/14/2016		19.7				
9/15/2016	27					
9/20/2016					1.78	
11/1/2016	25.6	18.4				
11/8/2016					1.77	
11/14/2016						7.79
1/11/2017	27.5	20.3				
1/17/2017					1.7	
2/28/2017						8.37
3/1/2017		18.6				
3/2/2017	27.5					
3/8/2017					1.77	
4/26/2017	30.4	25.6				
5/2/2017					1.57	
5/9/2017						13.9
6/28/2017	29.8	23.9				
7/7/2017					1.8	
7/13/2017						16.6
9/22/2017						18.4
9/29/2017						16.1
10/4/2017	29.7	22.1				
10/5/2017					1.7	
10/6/2017						16.6
10/11/2017						18.1
10/12/2017				122		
11/21/2017				118		
1/11/2018				119		
2/20/2018				124		
4/3/2018				114		
6/7/2018	29.1					
6/8/2018		21.9 (J)				
6/12/2018					1.8	
6/13/2018						18.7 (J)
6/29/2018				129		
8/6/2018				114		
9/24/2018				115		
9/26/2018					1.7	19.8 (J)
10/1/2018	26.9	19.7				
10/16/2018			6.5			
4/1/2019	30.1	20.4 (J)				
4/4/2019					1.9	16.9 (J)
9/25/2019	29.5	22.4				
9/26/2019			4.7		1.7	11.7
3/19/2020	31.5	21.9				
3/25/2020			7.9			10.6

Time Series

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/26/2020					1.7	
9/23/2020	28.6	23.6			2.4	
9/24/2020			3.6			
9/25/2020				108		
10/7/2020						9.9
3/3/2021	29.8	20.6			2.4	
3/4/2021			4.4	118		5.6

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						6.8	6.4		
6/7/2016					4.5			1.9	2.8
7/27/2016					4.5	6.7	6.2	1.9	
7/28/2016									2.6
9/16/2016					4.5		6.1		
9/19/2016						7		1.9	2.4
11/2/2016								2.6	
11/3/2016					5.4	7.5	7.4		2.9
1/11/2017					4.7	6.5	6.1		
1/13/2017								2.3	2.5
3/1/2017						6.9	6		
3/2/2017					4.8				
3/6/2017								1.9	2.1
4/26/2017						7	6.5	2	2.1
5/2/2017					4.6				
6/28/2017						7	6.4		
6/29/2017					4.5			2.6	2.8
10/3/2017									2.2
10/4/2017					4.7		6.8	2.6	
10/5/2017						7			
6/5/2018									1.7
6/6/2018								2.7	
6/7/2018						6.8			
6/11/2018					4.9		6.8		
9/25/2018					5.6	7.9	7.8	3.6	2.2
10/16/2018	12.1								
4/2/2019					4.8				2.5
4/3/2019						6.9	6.3	3.1	
9/24/2019									3.1
9/25/2019					5.7			2.8	
9/26/2019	6.4					7	7.1		
3/24/2020					5	7	6.8	2.7	2.8
3/25/2020	7.7								
9/23/2020		2.7	1.8		6.6	7.2	7.2		
9/24/2020	6.6			3.7				2.7	2
3/3/2021	6.1	2.5	22.9		7.1	7	7.2	2.7	
3/4/2021				3.7					1.8

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			3.7	7.2	4.3				
6/7/2016						2.9			
7/26/2016			3.6	6.6	4.4				
7/28/2016						3.5			
8/30/2016									4.4
9/14/2016			3.4	6.6	3.8				
9/20/2016						2.4			
11/2/2016			4.5	7.6					
11/4/2016					4.8				
11/8/2016						2.8			
11/16/2016									4.7
1/12/2017				6.8	3.8				
1/13/2017			4.2						
1/16/2017						1.8			
2/27/2017									4.7
3/6/2017			3.6						
3/7/2017				6.8	4.5				
3/9/2017						1.7			
5/1/2017			4.3	7.2					
5/2/2017					4.6	1.8			
5/10/2017									4.4
6/27/2017				7	4.3				
6/29/2017			4.2						
7/10/2017						1.9			
7/11/2017									4.7
10/3/2017				6.5	4.2				
10/5/2017			4.7						
10/11/2017	2.4					2.4			
10/12/2017		3.8					6	3.1	4.3
11/20/2017	1.8	4.4					6.9		
11/21/2017								4.2	
1/10/2018		4.6							
1/11/2018	1.6							3.8	
1/12/2018							6.6		
2/19/2018		4.6						3.5	
2/20/2018	2						6.2		
4/3/2018	3.3	5.9					6.9	4.4	
4/4/2018									3.7
6/6/2018				4.7					
6/7/2018			4.4		4.5				
6/12/2018						1.8			
6/27/2018								3.6	
6/28/2018	2.1	5					6.4		
8/7/2018	1.2	4.3					5.5	3.3	
9/20/2018									3.8
9/24/2018	1.3	4.9					5.9	3.3	
9/26/2018			4.8	4.8	5.1				
9/27/2018						2			
3/26/2019		4.4							
3/27/2019	1.4						6.2		3.9
3/28/2019								3.2	
4/3/2019			4.3	4	4.2				

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						1.7			
9/24/2019				3.7	4.5				
9/25/2019			4.5						
9/27/2019						1.7			
10/9/2019	2.1	5.1					5	3.3	4.1
3/24/2020		4.7		3.5	4.3				
3/25/2020	1.9		3.9				4	2.7	3.2
3/26/2020						1.6			
9/22/2020			4.5	3.6	4.2				
9/24/2020	2.7	5				2			3.3
9/25/2020							4	3	
3/2/2021				3.2	4.3				
3/3/2021			4.1						
3/4/2021	4.9	4.9				1.8	3.9	3.4	2.7

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						1.3	1.6		
6/2/2016					4.1				1.9
7/25/2016							1.4		1.7
7/26/2016					4	1.2			
8/30/2016			5.2						
8/31/2016	1.5			4					
9/1/2016		5.3							
9/13/2016						1.1	1.3		
9/14/2016								1.1	
9/15/2016					4.2				
9/19/2016									1.6
11/1/2016						1.3			1.8
11/2/2016					4.9				
11/4/2016							1.6	1.4	
11/14/2016			6.4						
11/15/2016		5.8							
11/16/2016	1.7								
11/28/2016				4.2					
12/15/2016								2.9	
1/10/2017					4.1				
1/11/2017						1.1			
1/16/2017							1.4	0.98	1.7
2/21/2017									1.7
2/22/2017				3.7					
2/24/2017	1.5		5.5						
2/27/2017		4.6							
3/2/2017						1	1.3		
3/3/2017								1.1	
3/8/2017					4.2				
4/26/2017					4.1				1.7
4/27/2017						1	1.3		
4/28/2017								0.91	
5/8/2017			5.8	4.2					
5/9/2017		5.3							
5/10/2017	1.2								
5/26/2017								0.93	
6/27/2017						1.1	1.4		
6/28/2017								1	
6/30/2017					3.7				1.8
7/11/2017	1.5		5.8						
7/13/2017		4.7							
7/17/2017				3.8					
10/3/2017						1.1	1.7	1.2	
10/4/2017									1.8
10/5/2017					3.8				
10/10/2017			5.9						
10/11/2017		5.8							
10/12/2017	1.6								
10/16/2017				4.2					
2/19/2018				4.3					
4/2/2018			4.8						
4/4/2018	1.8	4.3							

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						1.1			
6/6/2018							1.4		
6/7/2018								1	
6/8/2018					3.4				
6/11/2018									2
8/6/2018				3.8					
9/19/2018			4						
9/20/2018	1.9	4.8							
10/1/2018					3.8	1.1	1.4	1.1	
10/2/2018									1.8
2/25/2019				4.1					
3/27/2019			4.3						
3/28/2019	1.8	4.4				1.4	1.5		
3/29/2019					4.2			1.2	
4/1/2019									1.7
6/12/2019				4.7					
9/24/2019						1.1	1.3	0.95 (J)	
9/25/2019					4.8				1.6
9/26/2019		5							
10/8/2019			4.4	5.1					
10/9/2019	2.3								
3/17/2020			4.1	4.8					
3/18/2020					5.2		1.4		
3/19/2020						1.1		0.97 (J)	1.8
3/25/2020	1.8	4.1							
9/22/2020			4.2	4.2					
9/23/2020						0.99 (J)	1.2	0.88 (J)	
9/24/2020		4.6							1.5
9/25/2020	2.3				5.3				
3/1/2021			3.7						1.6
3/2/2021				4.1	4.9				
3/3/2021						0.96 (J)	1.2	0.86 (J)	
3/4/2021	2.1	4.1							

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		1.3				
6/2/2016	1.4					
6/8/2016					5.9	
7/25/2016		1.3				
7/26/2016	1.6					
8/1/2016					5.3	
9/2/2016						6.3
9/14/2016		1.3				
9/15/2016	1.5					
9/20/2016					5.5	
11/1/2016	1.7	1.4				
11/8/2016					6.4	
11/14/2016						6.7
1/11/2017	1.2	1.1				
1/17/2017					5.5	
2/28/2017						5.4
3/1/2017		1.1				
3/2/2017	1.2					
3/8/2017					5.4	
4/26/2017	1.2	1.1				
5/2/2017					5.7	
5/9/2017						5.7
6/28/2017	1.3	1.2				
7/7/2017					5.7	
7/13/2017						5.4
9/22/2017						6.9
9/29/2017						5.5
10/4/2017	1.5	1.2				
10/5/2017					6	
10/6/2017						5.5
10/11/2017						6.4
10/12/2017				5.4		
11/21/2017				6.5		
1/11/2018				5		
2/20/2018				5.2		
4/3/2018				4.8		
6/7/2018	1.2					
6/8/2018		1.2				
6/12/2018					6.2	
6/13/2018						5.6
6/29/2018				5.7		
8/6/2018				4.8		
9/24/2018				4.9		
9/26/2018					6.9	6
10/1/2018	1.5	1.2				
10/16/2018			8.5			
4/1/2019	1.2	1.1				
4/4/2019					5.9	5.4
9/25/2019	1.1	1.1				
9/26/2019			7.5		6.5	7.1
3/19/2020	1.2	1.1				
3/25/2020			6.8			6.3

Time Series

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/26/2020					5.4	
9/23/2020	1.1	1			9.3	
9/24/2020			7.5			
9/25/2020				4.3		
10/7/2020						8.7
3/3/2021	1.1	0.99 (J)			8.6	
3/4/2021			6.7	3.9		6.6

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						0.0012 (J)	<0.005		
6/7/2016					<0.005			<0.005	<0.005
7/27/2016					0.0008 (J)	0.0007 (J)	0.0006 (J)	0.0005 (J)	
7/28/2016									<0.005
9/16/2016					<0.005		<0.005		
9/19/2016						<0.005		<0.005	<0.005
11/2/2016								<0.005	
11/3/2016					<0.005	<0.005	<0.005		<0.005
1/11/2017					<0.005	<0.005	<0.005		
1/13/2017								<0.005	<0.005
3/1/2017						0.0012 (J)	<0.005		
3/2/2017					0.001 (J)				
3/6/2017								<0.005	<0.005
4/26/2017						0.0005 (J)	0.0003 (J)	0.0007 (J)	<0.005
5/2/2017					0.0007 (J)				
6/28/2017						0.0006 (J)	<0.005		
6/29/2017					0.0006 (J)			0.0005 (J)	<0.005
3/28/2018					<0.005	<0.005	<0.005		
3/29/2018								<0.005	<0.005
3/5/2019					<0.005		<0.005	<0.005	<0.005
3/6/2019						<0.005			
2/11/2020					0.00087 (J)	0.001 (J)	0.00088 (J)		
2/12/2020								0.00045 (J)	<0.005
3/24/2020					0.00087 (J)	0.00095 (J)	0.0011 (J)	0.00077 (J)	<0.005
3/25/2020	0.00058 (J)								
9/23/2020		0.00071 (J)	<0.005		0.00098 (J)	0.00092 (J)	0.0012 (J)		
9/24/2020	0.00074 (J)			<0.005				0.00076 (J)	<0.005
2/9/2021	0.001 (J)	0.0011 (J)	0.00057 (J)	<0.005		0.00083 (J)	0.0013 (J)	0.00056 (J)	<0.005
3/3/2021	0.00076 (J)	0.0012 (J)	<0.005		0.00082 (J)	0.00087 (J)	0.001 (J)	<0.005	
3/4/2021				<0.005					<0.005

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Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.005	<0.005	<0.005				
6/7/2016						<0.005			
7/26/2016			<0.005	<0.005	<0.005				
7/28/2016						0.0008 (J)			
8/30/2016									<0.005
9/14/2016			<0.005	<0.005	<0.005				
9/20/2016						<0.005			
11/2/2016			<0.005	<0.005					
11/4/2016					<0.005				
11/8/2016						<0.005			
11/16/2016									<0.005
1/12/2017				<0.005	<0.005				
1/13/2017			<0.005						
1/16/2017						<0.005			
2/27/2017									<0.005
3/6/2017			<0.005						
3/7/2017				<0.005	<0.005				
3/9/2017						<0.005			
5/1/2017			<0.005	0.0004 (J)					
5/2/2017					<0.005	0.0007 (J)			
5/10/2017									0.0006 (J)
6/27/2017				<0.005	<0.005				
6/29/2017			<0.005						
7/10/2017						<0.005			
7/11/2017									<0.005
10/11/2017	<0.005								
10/12/2017		<0.005					0.0005 (J)	<0.005	<0.005
11/20/2017	<0.005	<0.005					<0.005		
11/21/2017								<0.005	
1/10/2018		<0.005							
1/11/2018	<0.005							<0.005	
1/12/2018							<0.005		
2/19/2018		<0.005						<0.005	
2/20/2018	<0.005						<0.005		
3/29/2018			<0.005	<0.005	<0.005				
3/30/2018						<0.005			
4/3/2018	<0.005	<0.005					<0.005	<0.005	
4/4/2018									<0.005
6/27/2018								<0.005	
6/28/2018	<0.005	<0.005					<0.005		
8/7/2018	<0.005	<0.005					<0.005	<0.005	
9/20/2018									<0.005
9/24/2018	<0.005	<0.005					<0.005	<0.005	
3/4/2019			<0.005	<0.005	<0.005				
3/6/2019						<0.005			
8/21/2019	<0.005	0.00053 (J)							
8/22/2019							<0.005	<0.005	<0.005
10/9/2019	<0.005	0.0012 (J)					<0.005	<0.005	0.00043 (J)
2/12/2020	<0.005	0.00065 (J)	<0.005	<0.005	0.00043 (J)				
3/24/2020		0.00055 (J)		<0.005	0.0014 (J)				
3/25/2020	<0.005		0.00058 (J)				0.00065 (J)	0.00039 (J)	0.0013 (J)
3/26/2020						0.0019 (J)			

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Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
9/22/2020			<0.005	0.0011 (J)	<0.005				
9/24/2020	<0.005	<0.005				0.0011 (J)			<0.005
9/25/2020							<0.005	<0.005	
2/8/2021				<0.005	<0.005				
2/9/2021			<0.005			0.00086 (J)	<0.005		
2/10/2021	<0.005	<0.005						<0.005	<0.005
3/2/2021				<0.005	<0.005				
3/3/2021			0.0013 (J)						
3/4/2021	<0.005	<0.005				0.00078 (J)	<0.005	<0.005	<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.005
7/26/2016					<0.005	<0.005			
8/30/2016			<0.005						
8/31/2016	<0.005			<0.005					
9/1/2016		0.0013 (J)							
9/13/2016						<0.005	<0.005		
9/14/2016								<0.005	
9/15/2016					<0.005				
9/19/2016									<0.005
11/1/2016						<0.005			<0.005
11/2/2016					<0.005				
11/4/2016							<0.005	<0.005	
11/14/2016			0.0093 (J)						
11/15/2016		0.0014 (J)							
11/16/2016	<0.005								
11/28/2016				<0.005					
12/15/2016								<0.005	
1/10/2017					<0.005				
1/11/2017						<0.005			
1/16/2017							<0.005	<0.005	<0.005
2/21/2017									<0.005
2/22/2017				<0.005					
2/24/2017	<0.005		<0.005						
2/27/2017		0.0016 (J)							
3/2/2017						0.0009 (J)	0.0004 (J)		
3/3/2017								0.0005 (J)	
3/8/2017					<0.005				
4/26/2017					<0.005				0.0016 (J)
4/27/2017						<0.005	<0.005		
4/28/2017								0.0004 (J)	
5/8/2017			<0.005	<0.005					

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		0.0017 (J)							
5/10/2017	0.0005 (J)								
5/26/2017								<0.005	
6/27/2017						<0.005	<0.005		
6/28/2017								<0.005	
6/30/2017					<0.005				<0.005
7/11/2017	<0.005		<0.005						
7/13/2017		0.0019 (J)							
7/17/2017				<0.005					
10/10/2017			<0.005						
10/11/2017		0.0014 (J)							
10/12/2017	<0.005								
10/16/2017				<0.005					
2/19/2018				<0.005					
3/27/2018					<0.005		<0.005		<0.005
3/28/2018								<0.005	
3/29/2018						<0.005			
4/2/2018			<0.005						
4/4/2018	<0.005	<0.005							
8/6/2018				<0.005					
9/19/2018			<0.005						
9/20/2018	<0.005	0.0017 (J)							
2/25/2019				<0.005					
2/26/2019					<0.005				<0.005
2/27/2019						<0.005	<0.005	<0.005	
3/28/2019						<0.005	0.0021 (J)		
3/29/2019					<0.005			<0.005	
4/1/2019									<0.005
6/12/2019				<0.005					
8/19/2019				<0.005					
8/20/2019			<0.005						
8/21/2019	0.00062 (J)								
9/24/2019						0.00072 (J)	0.0028 (J)	<0.005	
9/25/2019					<0.005				<0.005
10/8/2019				<0.005					
10/9/2019	0.00074 (J)								
2/10/2020						0.00042 (J)	<0.005		
2/11/2020								<0.005	
2/12/2020					<0.005				<0.005
3/17/2020				<0.005					
3/18/2020					<0.005		0.00044 (J)		
3/19/2020						0.00084 (J)		0.00048 (J)	<0.005
3/25/2020	<0.005	0.0019 (J)							
8/26/2020				<0.005					
8/27/2020			<0.005						
9/22/2020			<0.005	<0.005					
9/23/2020						0.00062 (J)	0.00058 (J)	<0.005	
9/24/2020		0.0019 (J)							<0.005
9/25/2020	0.00071 (J)				<0.005				
2/9/2021	<0.005	0.002 (J)							
2/10/2021					<0.005			<0.005	
2/11/2021									<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
2/12/2021						<0.005	<0.005		
3/1/2021			<0.005						<0.005
3/2/2021				<0.005	<0.005				
3/3/2021						<0.005	<0.005	<0.005	
3/4/2021	<0.005	0.0017 (J)							

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.005				
6/2/2016	0.0013 (J)					
6/8/2016					<0.005	
7/25/2016		<0.005				
7/26/2016	<0.005					
8/1/2016					<0.005	
9/2/2016						<0.005
9/14/2016		<0.005				
9/15/2016	<0.005					
9/20/2016					<0.005	
11/1/2016	<0.005	<0.005				
11/8/2016					<0.005	
11/14/2016						0.0035
1/11/2017	<0.005	<0.005				
1/17/2017					<0.005	
2/28/2017						<0.005
3/1/2017		0.0004 (J)				
3/2/2017	0.0006 (J)					
3/8/2017					<0.005	
4/26/2017	<0.005	<0.005				
5/2/2017					0.0011 (J)	
5/9/2017						<0.005
6/28/2017	<0.005	<0.005				
7/7/2017					<0.005	
7/13/2017						<0.005
9/22/2017						<0.005
9/29/2017						<0.005
10/6/2017						<0.005
10/12/2017				0.0019 (J)		
11/21/2017				0.0017 (J)		
1/11/2018				0.001 (J)		
2/20/2018				<0.005		
3/28/2018	<0.005	<0.005				
3/30/2018					<0.005	<0.005
4/3/2018				<0.005		
6/29/2018				<0.005		
8/6/2018				<0.005		
9/24/2018				<0.005		
2/27/2019	<0.005	<0.005				
3/5/2019					<0.005	
3/6/2019						<0.005
4/1/2019	<0.005	<0.005				
9/25/2019	0.0014 (J)	0.0019 (J)				
2/11/2020		<0.005				
2/12/2020	<0.005					
3/19/2020	<0.005	<0.005				
3/25/2020			0.0012 (J)			0.00074 (J)
3/26/2020					0.00094 (J)	
9/23/2020	<0.005	<0.005			<0.005	
9/24/2020			0.00061 (J)			
9/25/2020				<0.005		
10/7/2020						0.0013 (J)

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/9/2021				<0.005	0.0011 (J)	
2/10/2021	<0.005	<0.005	0.0006 (J)			0.00094 (J)
3/3/2021	<0.005	<0.005			<0.005	
3/4/2021			0.0007 (J)	<0.005		<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.005	0.00061 (J)		
6/7/2016					<0.005			<0.005	0.0056
7/27/2016					<0.005	<0.005	0.0004 (J)	<0.005	
7/28/2016									0.0032 (J)
9/16/2016					<0.005		0.0008 (J)		
9/19/2016						<0.005		<0.005	0.0047 (J)
11/2/2016								<0.005	
11/3/2016					<0.005	<0.005	<0.005		0.013
1/11/2017					<0.005	<0.005	<0.005		
1/13/2017								<0.005	0.011
3/1/2017						<0.005	<0.005		
3/2/2017					<0.005				
3/6/2017								<0.005	0.011
4/26/2017						<0.005	<0.005	<0.005	0.009 (J)
5/2/2017					<0.005				
6/28/2017						<0.005	<0.005		
6/29/2017					<0.005			<0.005	0.0093 (J)
3/28/2018					<0.005	<0.005	<0.005		
3/29/2018								<0.005	<0.005
6/5/2018									0.0041 (J)
6/6/2018								<0.005	
6/7/2018						<0.005			
6/11/2018					<0.005		<0.005		
9/25/2018					<0.005	<0.005	<0.005	<0.005	0.0044 (J)
10/16/2018	0.032								
3/5/2019					<0.005		<0.005	<0.005	0.0039 (J)
3/6/2019						<0.005			
4/2/2019					<0.005				0.0039 (J)
4/3/2019						<0.005	<0.005	<0.005	
9/24/2019									0.0032 (J)
9/25/2019					<0.005			<0.005	
9/26/2019	0.015					<0.005	<0.005		
1/3/2020	<0.005								
2/11/2020					<0.005	<0.005	<0.005		
2/12/2020								<0.005	0.0081
3/24/2020					<0.005	<0.005	<0.005	<0.005	0.0061
3/25/2020	<0.005								
9/23/2020		0.0025 (J)	0.00052 (J)		<0.005	<0.005	<0.005		
9/24/2020	0.01			0.00077 (J)				<0.005	0.0079
2/9/2021	0.03	0.001 (J)	0.00063 (J)	<0.005		<0.005	<0.005	<0.005	0.009
3/3/2021	0.018	0.00082 (J)	0.001 (J)		<0.005	<0.005	<0.005	<0.005	
3/4/2021				<0.005					0.0065

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			0.00082 (J)	<0.005	<0.005				
6/7/2016						<0.005			
7/26/2016			0.0012 (J)	<0.005	<0.005				
7/28/2016						<0.005			
8/30/2016									0.0025 (J)
9/14/2016			0.0006 (J)	<0.005	<0.005				
9/20/2016						<0.005			
11/2/2016			<0.005	<0.005					
11/4/2016					<0.005				
11/8/2016						<0.005			
11/16/2016									0.002 (J)
1/12/2017				<0.005	<0.005				
1/13/2017			0.0029 (J)						
1/16/2017						<0.005			
2/27/2017									0.0021 (J)
3/6/2017			0.0006 (J)						
3/7/2017				<0.005	<0.005				
3/9/2017						<0.005			
5/1/2017			<0.005	<0.005					
5/2/2017					<0.005	<0.005			
5/10/2017									0.0021 (J)
6/27/2017				<0.005	<0.005				
6/29/2017			0.0005 (J)						
7/10/2017						<0.005			
7/11/2017									0.0014 (J)
10/11/2017	<0.005								
10/12/2017		<0.005					<0.005	0.0011 (J)	0.0017 (J)
11/20/2017	<0.005	<0.005					<0.005		
11/21/2017								0.0003 (J)	
1/10/2018		<0.005							
1/11/2018	<0.005							0.0003 (J)	
1/12/2018							<0.005		
2/19/2018		<0.005						<0.005	
2/20/2018	<0.005						<0.005		
3/29/2018			<0.005	<0.005	<0.005				
3/30/2018						<0.005			
4/3/2018	<0.005	<0.005					<0.005	<0.005	
4/4/2018									<0.005
6/6/2018				<0.005					
6/7/2018			0.00058 (J)		<0.005				
6/12/2018						<0.005			
6/27/2018								0.00069 (J)	
6/28/2018	<0.005	<0.005					<0.005		
8/7/2018	<0.005	<0.005					<0.005	<0.005	
9/20/2018									0.003 (J)
9/24/2018	<0.005	<0.005					<0.005	<0.005	
9/26/2018			<0.005	<0.005	<0.005				
9/27/2018						<0.005			
3/4/2019			<0.005	<0.005	<0.005				
3/6/2019						<0.005			
4/3/2019			0.00083 (J)	<0.005	<0.005				
4/4/2019						<0.005			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	0.00034 (J)	<0.005							
8/22/2019							<0.005	<0.005	0.0019 (J)
9/24/2019				<0.005	<0.005				
9/25/2019			<0.005						
9/27/2019						<0.005			
10/9/2019	<0.005	<0.005					<0.005	<0.005	0.0019 (J)
2/12/2020	0.00034 (J)	<0.005	<0.005	0.00037 (J)	<0.005				
3/24/2020		<0.005		0.00035 (J)	<0.005				
3/25/2020	0.00034 (J)		0.00056 (J)				<0.005	<0.005	0.0018 (J)
3/26/2020						<0.005			
9/22/2020			<0.005	<0.005	<0.005				
9/24/2020	0.00053 (J)	<0.005				<0.005			0.0017 (J)
9/25/2020							<0.005	<0.005	
2/8/2021				<0.005	<0.005				
2/9/2021			<0.005			<0.005	<0.005		
2/10/2021	0.00098 (J)	<0.005						<0.005	0.0019 (J)
3/2/2021				<0.005	<0.005				
3/3/2021			<0.005						
3/4/2021	0.00071 (J)	<0.005				<0.005	<0.005	<0.005	0.0018 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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				0.035
7/25/2016							0.0008 (J)		0.0312
7/26/2016					<0.005	<0.005			
8/30/2016			0.0073 (J)						
8/31/2016	<0.005			0.0053 (J)					
9/1/2016		<0.005							
9/13/2016						<0.005	0.0009 (J)		
9/14/2016								<0.005	
9/15/2016					<0.005				
9/19/2016									0.0275
11/1/2016						<0.005			0.0255
11/2/2016					<0.005				
11/4/2016							0.0025 (J)	<0.005	
11/14/2016			0.0115						
11/15/2016		0.0006 (J)							
11/16/2016	<0.005								
11/28/2016				0.0036 (J)					
12/15/2016								<0.005	
1/10/2017					<0.005				
1/11/2017						<0.005			
1/16/2017							0.0027 (J)	<0.005	0.0245
2/21/2017									0.0272
2/22/2017				0.0049 (J)					
2/24/2017	<0.005		0.0106						
2/27/2017		0.0008 (J)							
3/2/2017						<0.005	0.0022 (J)		
3/3/2017								<0.005	
3/8/2017					<0.005				
4/26/2017					<0.005				0.0244
4/27/2017						<0.005	0.0018 (J)		
4/28/2017								<0.005	
5/8/2017			0.0099 (J)	0.0059 (J)					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.005							
5/10/2017	<0.005								
5/26/2017								<0.005	
6/27/2017						<0.005	0.0023 (J)		
6/28/2017								<0.005	
6/30/2017					<0.005				0.0233
7/11/2017	<0.005		0.0096 (J)						
7/13/2017		0.0005 (J)							
7/17/2017				0.0046 (J)					
10/10/2017			0.0036 (J)						
10/11/2017		0.0006 (J)							
10/12/2017	0.0006 (J)								
10/16/2017				0.0034 (J)					
2/19/2018				<0.005					
3/27/2018					<0.005		<0.005		0.023
3/28/2018								<0.005	
3/29/2018						<0.005			
4/2/2018			<0.005						
4/4/2018	<0.005	<0.005							
6/5/2018						<0.005			
6/6/2018							<0.005		
6/7/2018								<0.005	
6/8/2018					<0.005				
6/11/2018									0.023
8/6/2018				0.003 (J)					
9/19/2018			0.0036 (J)						
9/20/2018	0.0034 (J)	<0.005							
10/1/2018					<0.005	<0.005	0.00059 (J)	<0.005	
10/2/2018									0.022
2/25/2019				0.001 (J)					
2/26/2019					<0.005				0.021
2/27/2019						<0.005	0.00064 (J)	<0.005	
3/28/2019						<0.005	0.00091 (J)		
3/29/2019					<0.005			<0.005	
4/1/2019									0.022
6/12/2019				0.003 (J)					
8/19/2019				0.0035 (J)					
8/20/2019			0.00092 (J)						
8/21/2019	0.0026 (J)								
9/24/2019						<0.005	0.0013 (J)	<0.005	
9/25/2019					<0.005				0.016
9/26/2019		<0.005							
10/8/2019			0.0014 (J)	0.0039 (J)					
10/9/2019	0.0023 (J)								
2/10/2020						<0.005	0.0016 (J)		
2/11/2020								<0.005	
2/12/2020					<0.005				0.014
3/17/2020			0.0017 (J)	0.003 (J)					
3/18/2020					<0.005		0.00087 (J)		
3/19/2020						<0.005		<0.005	0.014
3/25/2020	0.0016 (J)	<0.005							
8/26/2020				0.2 (O)					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/27/2020			0.0011 (J)						
9/22/2020			0.00097 (J)	0.16 (O)					
9/23/2020						<0.005	0.0013 (J)	<0.005	
9/24/2020		<0.005							0.0064
9/25/2020	0.0018 (J)				<0.005				
2/9/2021	0.0017 (J)	<0.005							
2/10/2021					<0.005			<0.005	
2/11/2021									0.0078
2/12/2021						0.00086 (J)	0.0028 (J)		
3/1/2021			0.001 (J)						0.0061
3/2/2021				0.21 (O)	<0.005				
3/3/2021						<0.005	0.003 (J)	<0.005	
3/4/2021	0.0015 (J)	<0.005							

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.005				
6/2/2016	<0.005					
6/8/2016					<0.005	
7/25/2016		<0.005				
7/26/2016	<0.005					
8/1/2016					<0.005	
9/2/2016						0.0006 (J)
9/14/2016		<0.005				
9/15/2016	<0.005					
9/20/2016					<0.005	
11/1/2016	<0.005	<0.005				
11/8/2016					<0.005	
11/14/2016						<0.005
1/11/2017	<0.005	<0.005				
1/17/2017					<0.005	
2/28/2017						<0.005
3/1/2017		<0.005				
3/2/2017	<0.005					
3/8/2017					<0.005	
4/26/2017	<0.005	<0.005				
5/2/2017					<0.005	
5/9/2017						<0.005
6/28/2017	<0.005	<0.005				
7/7/2017					<0.005	
7/13/2017						<0.005
9/22/2017						<0.005
9/29/2017						<0.005
10/6/2017						<0.005
10/12/2017				0.0078 (J)		
11/21/2017				0.0097 (J)		
1/11/2018				0.0131		
2/20/2018				0.0162		
3/28/2018	<0.005	<0.005				
3/30/2018					<0.005	<0.005
4/3/2018				0.015		
6/7/2018	<0.005					
6/8/2018		<0.005				
6/12/2018					<0.005	
6/13/2018						<0.005
6/29/2018				0.013		
8/6/2018				0.0053 (J)		
9/24/2018				0.0071 (J)		
9/26/2018					<0.005	<0.005
10/1/2018	<0.005	<0.005				
10/16/2018			<0.005			
2/27/2019	<0.005	<0.005				
3/5/2019					<0.005	
3/6/2019						<0.005
4/1/2019	<0.005	<0.005				
4/4/2019					<0.005	<0.005
9/25/2019	<0.005	<0.005				
9/26/2019			<0.005		<0.005	0.00048 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/11/2020		<0.005				
2/12/2020	<0.005					
3/19/2020	<0.005	<0.005				
3/25/2020			0.0059			0.00038 (J)
3/26/2020					<0.005	
9/23/2020	<0.005	<0.005			<0.005	
9/24/2020			<0.005			
9/25/2020				0.0023 (J)		
10/7/2020						0.00086 (J)
2/9/2021				0.0023 (J)	<0.005	
2/10/2021	<0.005	<0.005	<0.005			0.00038 (J)
3/3/2021	<0.005	<0.005			<0.005	
3/4/2021			<0.005	0.003 (J)		<0.005

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						0.0804 (U)	0.301 (U)		
6/7/2016					0.158 (U)			0.0191 (U)	0.347
7/27/2016					0.0354 (U)	0.206 (U)	0.196 (U)	0.541 (U)	
7/28/2016									0.815 (U)
9/16/2016					1.04		0.915 (U)		
9/19/2016						1.58		0.826 (U)	0.862 (U)
11/2/2016								0.791 (U)	
11/3/2016					0.314 (U)	0.342 (U)	0.928 (U)		0.797 (U)
1/11/2017					0.34 (U)	0.365 (U)	0.502 (U)		
1/13/2017								0.296 (U)	0.72 (U)
3/1/2017						0.395 (U)	0.202 (U)		
3/2/2017					0.746 (U)				
3/6/2017								0.518 (U)	0.518 (U)
4/26/2017						0.507 (U)	0.264 (U)	0.282 (U)	1.13 (U)
5/2/2017					0.111 (U)				
6/28/2017						0.892	0.636 (U)		
6/29/2017					0.576 (U)			1.12	0.841 (U)
3/28/2018					0.438 (U)	0.92 (U)	0.56 (U)		
3/29/2018								1.73	1.91
6/5/2018									1.39
6/6/2018								0.694 (U)	
6/7/2018						0.668 (U)			
6/11/2018					0.901 (U)		0.649 (U)		
9/25/2018					0.68 (U)	0.141 (U)	0.574 (U)	0.772 (U)	1.62
10/16/2018	0.384 (U)								
3/5/2019					0.272 (U)		0.474 (U)	0.84 (U)	0.985 (U)
3/6/2019						0.714 (U)			
4/2/2019					0.847 (U)				1.42
4/3/2019						0.385 (U)	0.429 (U)	1.01	
9/24/2019									1.35
9/25/2019					0.412 (U)			1.18 (U)	
9/26/2019						0.386 (U)	0.222 (U)		
2/11/2020					0.461 (U)	1.48	0.597 (U)		
2/12/2020								1.11 (U)	1.61
3/24/2020					0.534 (U)	0.632 (U)	0.262 (U)	1.88	1.24 (U)
3/25/2020	0.525 (U)								
9/23/2020		0.0813 (U)	1.2 (U)		0.466 (U)	0.887 (U)	0.43 (U)		
9/24/2020	0.547 (U)			0.668 (U)				0.611 (U)	1.8
2/9/2021	0.866 (U)	0.492 (U)	0.659 (U)	1.07 (U)	0.529 (U)	0.314 (U)	0.259 (U)	0.284 (U)	1.24
3/3/2021	0.377 (U)	0.563 (U)	1.07		0.59 (U)	0.565 (U)	0.352 (U)	0.133 (U)	1.2
3/4/2021				1.46					

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			0.721	5.11	0.614				
6/7/2016						0.303 (U)			
7/26/2016			1.26	6.92	1.47				
7/28/2016						0.386 (U)			
8/30/2016									2.99
9/14/2016			0.901 (U)	3.96	1.27				
9/20/2016						1.47			
11/2/2016			1.09 (U)	4.53					
11/4/2016					0.434 (U)				
11/8/2016						0.22 (U)			
11/16/2016									4.01
1/12/2017				4.43	0.202 (U)				
1/13/2017			1.19						
1/16/2017						0.147 (U)			
2/27/2017									2.5
3/6/2017			0.669 (U)						
3/7/2017				4.8	0.0674 (U)				
3/9/2017						0.0892 (U)			
5/1/2017			0.803 (U)	4.16					
5/2/2017					0.444 (U)	0.149 (U)			
5/10/2017									2.55
6/27/2017				2.8	0.77 (U)				
6/29/2017			1.35						
7/10/2017						0.815 (U)			
7/11/2017									3.94
10/11/2017	0.586 (U)								
10/12/2017		1.49					1.24	0.641 (U)	3.57
11/20/2017	0.816 (U)	0.918 (U)					0.342 (U)		
11/21/2017								2.01	
1/10/2018		1.05							
1/11/2018	0.841 (U)							0.919 (U)	
1/12/2018							1.04		
2/19/2018		2.05						1.82	
2/20/2018	1.58						1.6 (U)		
3/29/2018			0.703 (U)	3.42	0.648 (U)				
3/30/2018						0.659 (U)			
4/3/2018	0.385 (U)	0.68 (U)					0.726 (U)	0.911 (U)	
4/4/2018									1.9
6/6/2018				3.99					
6/7/2018			0.628 (U)		0.745 (U)				
6/12/2018						1.03 (U)			
6/27/2018								0.429 (U)	
6/28/2018	0.283 (U)	1.28					1.06 (U)		
8/7/2018	0.332 (U)	1.16					1.21	0.579 (U)	
9/20/2018									1.94
9/24/2018	0.767 (U)	0.965 (U)					1.52	1.39	
9/26/2018			0.756 (U)	2.73	0.377 (U)				
9/27/2018						1.06 (U)			
3/4/2019			1.21 (U)	4.43	1 (U)				
3/6/2019						0.736 (U)			
4/3/2019			1.07 (U)	4.79	0.43 (U)				
4/4/2019						0.474 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	1.01 (U)	1.24 (U)							
8/22/2019							1.97	2.03	1.59
9/24/2019				4.06	0.699 (U)				
9/25/2019			1.86						
9/27/2019						0.684 (U)			
10/8/2019	1.02 (U)	0.866 (U)					0.751 (U)	0.609 (U)	0.995 (U)
2/12/2020	0.45 (U)	1.83	1.25	4.02	0.913 (U)				
3/24/2020		1.27 (U)		3.52					
3/25/2020	0.377 (U)		0.766 (U)				0.321 (U)	0.568 (U)	1.17 (U)
3/26/2020						0.281 (U)			
9/22/2020			0.795 (U)	2.98	0.428 (U)				
9/24/2020	0.568 (U)	0.634 (U)				0.788 (U)			0.751 (U)
9/25/2020							0.246 (U)	0.769 (U)	
2/8/2021				2.89	0.613 (U)				
2/9/2021			0.626 (U)			0.464 (U)	0.626 (U)		
2/10/2021	0.518 (U)	0.783 (U)						0.548 (U)	0.612 (U)
3/2/2021				1.67	0.579 (U)				
3/3/2021			1						
3/4/2021	0.636 (U)	0.818 (U)				0.771 (U)	0.816 (U)	1.23	1.02

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						0.321 (U)	0.42		
6/2/2016					0.329 (U)				0.0652 (U)
7/25/2016							1.83		3.01
7/26/2016					1.51	0.707 (U)			
8/30/2016			1.09						
8/31/2016	0.926 (U)			1.2					
9/1/2016		1.2							
9/13/2016						1.22	0.841		
9/14/2016								0.98 (U)	
9/15/2016					1.04 (U)				
9/19/2016									0.871 (U)
11/1/2016						0.805 (U)			0.307 (U)
11/2/2016					0.496 (U)				
11/4/2016							0.166 (U)	0.277 (U)	
11/15/2016		0.645 (U)							
11/16/2016	0.773 (U)								
11/28/2016				0.264 (U)					
12/15/2016			1 (U)					0.071 (U)	
1/10/2017					0.376 (U)				
1/11/2017						0.705 (U)			
1/16/2017							0	0.44 (U)	0.284 (U)
2/21/2017									0.503 (U)
2/22/2017				1.06 (U)					
2/24/2017	0.661 (U)		0.504 (U)						
2/27/2017		0.244 (U)							
3/2/2017						0.251 (U)	0.504 (U)		
3/3/2017								0.448 (U)	
3/8/2017					0.0745 (U)				
4/26/2017					0.282 (U)				0.204 (U)
4/27/2017						1.08	0.593 (U)		
4/28/2017								0.548 (U)	
5/8/2017			0.455 (U)	0.187 (U)					
5/9/2017		0.519 (U)							
5/10/2017	1.27								
5/26/2017								0 (U)	
6/27/2017						1.02 (U)	0.657 (U)		
6/28/2017								0.608 (U)	
6/30/2017					0.994				0.738 (U)
7/11/2017	1.02		0.471 (U)						
7/13/2017		0.5 (U)							
7/17/2017				1.42					
10/10/2017			0.649 (U)						
10/11/2017		1.41							
10/12/2017	1.58								
10/16/2017				1.17					
2/19/2018				1.58 (D)					
3/27/2018					0.189 (U)		0.39 (U)		0.31 (U)
3/28/2018								0.412 (U)	
3/29/2018						0.503 (U)			
4/2/2018			0.512 (U)						
4/4/2018	1.71	0.442 (U)							
6/5/2018						0.771 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/6/2018							2.8		
6/7/2018								0.73 (U)	
6/8/2018					0.218 (U)				
6/11/2018									0.608 (U)
8/6/2018				0.196 (U)					
9/19/2018			0.789 (U)						
9/20/2018	2.8	1.14 (U)							
10/1/2018					1.24	0.783 (U)	1.06 (U)	0.756 (U)	
10/2/2018									0.97 (U)
2/26/2019					0.202 (U)				0.524 (U)
2/27/2019						1.21 (U)	0.637 (U)	0.635 (U)	
3/28/2019						1.13 (U)	0.125 (U)		
3/29/2019					0 (U)			0.224 (U)	
4/1/2019									1.02 (U)
8/19/2019				1.39					
8/20/2019			2.44						
8/21/2019	3.16								
9/24/2019						1.22 (U)	0.949 (U)	0.429 (U)	
9/25/2019					0.707 (U)				1.02 (U)
9/26/2019		1.16 (U)							
10/8/2019	3.65		1.72	1.32 (U)					
2/10/2020						1.41	1.25 (U)		
2/11/2020								0.817 (U)	
2/12/2020					1.07 (U)				0.301 (U)
3/17/2020			1.22 (U)	1 (U)					
3/18/2020					0.207 (U)		0.458 (U)		
3/19/2020						1.1		0.715 (U)	1
3/25/2020	3.04	1.2 (U)							
8/26/2020				1.75					
8/27/2020			1.26 (U)						
9/22/2020			1.06 (U)	0.688 (U)					
9/23/2020						1.35 (U)	0.00884 (U)	0.565 (U)	
9/24/2020		1.57 (U)							0.684 (U)
9/25/2020	4.75				0.603 (U)				
2/9/2021	6.38	0.137 (U)							
2/10/2021					0.353 (U)			1.04 (U)	
2/11/2021									0.678 (U)
2/12/2021						0.366 (U)	0.458 (U)		
3/1/2021			1.2						0.412 (U)
3/2/2021				0.948 (U)	0.71 (U)				
3/3/2021						0.492 (U)	0.105 (U)	0.459 (U)	
3/4/2021	6.02	0.579 (U)							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		0.896				
6/2/2016	2.51					
6/8/2016					1.06	
7/25/2016		2.28				
7/26/2016	3.82					
8/1/2016					0.467 (U)	
9/2/2016						0.873 (U)
9/14/2016		0.821 (U)				
9/15/2016	4.24					
9/20/2016					0.853 (U)	
9/22/2016						0.667 (U)
9/29/2016						1.63
10/6/2016						0.641 (U)
11/1/2016	3.92	0.585 (U)				
11/8/2016					0.433 (U)	
11/14/2016						0.0451 (U)
1/11/2017	2.52	1.22				
1/17/2017					0.0759 (U)	
2/28/2017						1.34 (U)
3/1/2017		0.877 (U)				
3/2/2017	3.13					
3/8/2017					0.479 (U)	
4/26/2017	2.35	0.672 (U)				
5/2/2017					0.506 (U)	
5/9/2017						0.309 (U)
6/28/2017	2.6	1.07 (U)				
7/7/2017					0.713 (U)	
7/13/2017						0.618 (U)
10/12/2017				1.83		
11/21/2017				1.33		
1/11/2018				1.53		
2/20/2018				2.75		
3/28/2018	3	0.65 (U)				
3/30/2018					0.409 (U)	0.721 (U)
4/3/2018				1.47		
6/7/2018	2.79					
6/8/2018		1.89				
6/12/2018					0.728 (U)	
6/13/2018						1.04 (U)
6/29/2018				1.69		
8/6/2018				1.69		
9/24/2018				2.26		
9/26/2018					0.981	0.604 (U)
10/1/2018	3.14	1.58				
10/16/2018			0.363 (U)			
2/27/2019	3.79	3.67				
3/5/2019					0.837 (U)	
3/6/2019						0.919 (U)
4/1/2019	4.33	2.28				
4/4/2019						1.05 (U)
4/9/2019					0.502 (U)	
9/25/2019	4.2	1.6				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
9/26/2019					0.964 (U)	0.979 (U)
2/11/2020	3.87	1.85				
3/19/2020	3.96	2.2				
3/25/2020			0.197 (U)			1.22 (U)
3/26/2020					0.511 (U)	
9/23/2020	4.14	1.14 (U)			0.786 (U)	
9/24/2020			1.07 (U)			
9/25/2020				1.68 (U)		
10/7/2020						1.58
2/9/2021				1.52	0.678 (U)	
2/10/2021	3.65	2.46	0.546 (U)			0.466 (U)
3/3/2021	3.58	2.03			0.415 (U)	
3/4/2021			0.397 (U)	1.49		0.0671 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.1	<0.1		
6/7/2016					<0.1			<0.1	<0.1
7/27/2016					<0.1	<0.1	<0.1	<0.1	
7/28/2016									0.02 (J)
9/16/2016					<0.1		<0.1		
9/19/2016						<0.1		<0.1	0.02 (J)
11/2/2016								<0.1	
11/3/2016					<0.1	<0.1	<0.1		<0.1
1/11/2017					<0.1	<0.1	<0.1		
1/13/2017								<0.1	<0.1
3/1/2017						<0.1	<0.1		
3/2/2017					<0.1				
3/6/2017								<0.1	<0.1
4/26/2017						<0.1	<0.1	<0.1	0.04 (J)
5/2/2017					<0.1				
6/28/2017						<0.1	<0.1		
6/29/2017					<0.1			<0.1	<0.1
10/3/2017									<0.1
10/4/2017					<0.1		<0.1	<0.1	
10/5/2017						<0.1			
3/28/2018					<0.1	<0.1	<0.1		
3/29/2018								<0.1	<0.1
6/5/2018									0.13 (J)
6/6/2018								<0.1	
6/7/2018						<0.1			
6/11/2018					<0.1		<0.1		
9/25/2018					<0.1	<0.1	<0.1	<0.1	0 (J)
10/16/2018	<0.1								
3/5/2019					<0.1		<0.1	<0.1	0.32
3/6/2019						<0.1			
4/2/2019					<0.1				0.12 (J)
4/3/2019						<0.1	<0.1	<0.1	
9/24/2019									0.15 (J)
9/25/2019					<0.1			<0.1	
9/26/2019	<0.1					<0.1	<0.1		
2/11/2020					<0.1	<0.1	<0.1		
2/12/2020								<0.1	0.1 (J)
3/24/2020					<0.1	<0.1	<0.1	<0.1	0.081 (J)
3/25/2020	<0.1								
9/23/2020		<0.1	<0.1		<0.1	<0.1	<0.1		
9/24/2020	<0.1			<0.1				<0.1	0.079 (J)
2/9/2021	<0.1	<0.1	0.14	<0.1		<0.1	<0.1	<0.1	0.092 (J)
3/3/2021	<0.1	<0.1	0.14		<0.1	<0.1	<0.1	<0.1	
3/4/2021				<0.1					0.091 (J)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.1	0.11 (J)	<0.1				
6/7/2016						<0.1			
7/26/2016			<0.1	0.05 (J)	<0.1				
7/28/2016						0.03 (J)			
8/30/2016									0.02 (J)
9/14/2016			<0.1	0.04 (J)	<0.1				
9/20/2016						<0.1			
11/2/2016			<0.1	<0.1					
11/4/2016					<0.1				
11/8/2016						<0.1			
11/16/2016									0.07 (J)
1/12/2017				0.04 (J)	<0.1				
1/13/2017			<0.1						
1/16/2017						<0.1			
2/27/2017									0.06 (J)
3/6/2017			<0.1						
3/7/2017				<0.1	<0.1				
3/9/2017						<0.1			
5/1/2017			<0.1	<0.1					
5/2/2017					<0.1	<0.1			
5/10/2017									<0.1
6/27/2017				<0.1	<0.1				
6/29/2017			<0.1						
7/10/2017						<0.1			
7/11/2017									<0.1
10/3/2017				<0.1	<0.1				
10/5/2017			<0.1						
10/11/2017	<0.1					<0.1			
10/12/2017		<0.1					<0.1	<0.1	<0.1
11/20/2017	<0.1	<0.1					0.2 (J)		
11/21/2017								<0.1	
1/10/2018		<0.1							
1/11/2018	<0.1							<0.1	
1/12/2018							0.21 (J)		
2/19/2018		<0.1						<0.1	
2/20/2018	0.23						<0.1		
3/29/2018			<0.1	<0.1	<0.1				
3/30/2018						<0.1			
4/3/2018	<0.1	<0.1					0.41	<0.1	
4/4/2018									<0.1
6/6/2018				0.15 (J)					
6/7/2018			<0.1		<0.1				
6/12/2018						<0.1			
6/27/2018								<0.1	
6/28/2018	<0.1	<0.1					0.43		
8/7/2018	0.048 (J)	<0.1					<0.1	0.11 (J)	
9/20/2018									0.041 (J)
9/24/2018	<0.1	<0.1					0.034 (J)	<0.1	
9/26/2018			<0.1	<0.1	<0.1				
9/27/2018						<0.1			
3/4/2019			<0.1	0.19 (J)	<0.1				
3/6/2019						<0.1			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
3/26/2019		<0.1							
3/27/2019	<0.1						0.24 (J)		<0.1
3/28/2019								0.1 (J)	
4/3/2019			<0.1	0.047 (J)	<0.1				
4/4/2019						0.049 (J)			
8/21/2019	<0.1	<0.1							
8/22/2019							<0.1	<0.1	<0.1
9/24/2019				0.05 (J)	<0.1				
9/25/2019			<0.1						
9/27/2019						0.12 (J)			
10/9/2019	<0.1	<0.1					<0.1	<0.1	<0.1
2/12/2020	<0.1	<0.1	<0.1	<0.1	<0.1				
3/24/2020		<0.1		<0.1	<0.1				
3/25/2020	<0.1		<0.1				<0.1	<0.1	<0.1
3/26/2020						<0.1			
9/22/2020			<0.1	0.056 (J)	<0.1				
9/24/2020	<0.1	<0.1				<0.1			<0.1
9/25/2020							<0.1	<0.1	
2/8/2021				0.055 (J)	<0.1				
2/9/2021			<0.1			<0.1	<0.1		
2/10/2021	<0.1	<0.1						<0.1	<0.1
3/2/2021				<0.1	<0.1				
3/3/2021			<0.1						
3/4/2021	<0.1	<0.1				<0.1	<0.1	<0.1	<0.1

Time Series

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						0.12 (J)	<0.1		
6/2/2016					<0.1				<0.1
7/25/2016							0.06 (J)		0.06 (J)
7/26/2016					0.02 (J)	0.08 (J)			
8/30/2016			0.09 (J)						
8/31/2016	0.12 (J)			0.14 (J)					
9/1/2016		0.09 (J)							
9/13/2016						0.11 (J)	<0.1		
9/14/2016								0.08 (J)	
9/15/2016					<0.1				
9/19/2016									<0.1
11/1/2016						<0.1			<0.1
11/2/2016					<0.1				
11/4/2016							<0.1	<0.1	
11/14/2016			0.18 (J)						
11/15/2016		0.16 (J)							
11/16/2016	0.2 (J)								
11/28/2016				0.12 (J)					
12/15/2016								0.06 (J)	
1/10/2017					<0.1				
1/11/2017						0.05 (J)			
1/16/2017							<0.1	0.1 (J)	<0.1
2/21/2017									<0.1
2/22/2017				0.09 (J)					
2/24/2017	0.21 (J)		0.05 (J)						
2/27/2017		0.06 (J)							
3/2/2017						<0.1	<0.1		
3/3/2017								<0.1	
3/8/2017					<0.1				
4/26/2017					<0.1				<0.1
4/27/2017						0.04 (J)	0.01 (J)		
4/28/2017								0.06 (J)	
5/8/2017			0.03 (J)	0.05 (J)					
5/9/2017		0.05 (J)							
5/10/2017	0.04 (J)								
5/26/2017								0.09 (J)	
6/27/2017						<0.1	<0.1		
6/28/2017								0.11 (J)	
6/30/2017					<0.1				<0.1
7/11/2017	0.2 (J)		0.07 (J)						
7/13/2017		<0.1							
7/17/2017				0.14 (J)					
10/3/2017						<0.1	<0.1	<0.1	
10/4/2017									<0.1
10/5/2017					<0.1				
10/10/2017			<0.1						
10/11/2017		0.14 (J)							
10/12/2017	0.1 (J)								
10/16/2017				0.12 (J)					
2/19/2018				0.17					
3/27/2018					<0.1		<0.1		<0.1
3/28/2018								0.31	

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Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
3/29/2018						<0.1			
4/2/2018			<0.1						
4/4/2018	<0.1	<0.1							
6/5/2018						0.055 (J)			
6/6/2018							<0.1		
6/7/2018								0.11 (J)	
6/8/2018					<0.1				
6/11/2018									<0.1
8/6/2018				0.087 (J)					
9/19/2018			<0.1						
9/20/2018	<0.1	<0.1							
10/1/2018					<0.1	<0.1	<0.1	<0.1	
10/2/2018									<0.1
2/25/2019				0.14 (J)					
2/26/2019					<0.1				<0.1
2/27/2019						0.052 (J)	<0.1	0.12 (J)	
3/27/2019			0.081 (J)						
3/28/2019	0.078 (J)	<0.1				0.036 (J)	<0.1		
3/29/2019					<0.1			0.13 (J)	
4/1/2019									<0.1
6/12/2019				0.12 (J)					
8/19/2019				<0.1					
8/20/2019			<0.1						
8/21/2019	0.062 (J)								
9/24/2019						0.063 (J)	<0.1	0.081 (J)	
9/25/2019					<0.1				<0.1
9/26/2019		0.09 (J)							
10/8/2019			0.034 (J)	0.052 (J)					
10/9/2019	<0.1								
2/10/2020						0.061 (J)	<0.1		
2/11/2020								0.075 (J)	
2/12/2020					<0.1				<0.1
3/17/2020			<0.1	0.053 (J)					
3/18/2020					<0.1		<0.1		
3/19/2020						0.064 (J)		0.093 (J)	<0.1
3/25/2020	0.073 (J)	<0.1							
8/26/2020				0.068 (J)					
8/27/2020			<0.1						
9/22/2020			<0.1	0.058 (J)					
9/23/2020						0.058 (J)	<0.1	0.08 (J)	
9/24/2020		<0.1							<0.1
9/25/2020	<0.1				<0.1				
2/9/2021	0.058 (J)	<0.1							
2/10/2021					<0.1			0.094 (J)	
2/11/2021									<0.1
2/12/2021						0.068 (J)	<0.1		
3/1/2021			<0.1						<0.1
3/2/2021				0.073 (J)	<0.1				
3/3/2021						0.078 (J)	<0.1	0.085 (J)	
3/4/2021	0.063 (J)	<0.1							

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Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		0.15 (J)				
6/2/2016	0.62					
6/8/2016					<0.1	
7/25/2016		0.14 (J)				
7/26/2016	0.49					
8/1/2016					<0.1	
9/2/2016						0.05 (J)
9/14/2016		0.18 (J)				
9/15/2016	0.54					
9/20/2016					<0.1	
11/1/2016	0.68	<0.1				
11/8/2016					<0.1	
11/14/2016						0.18 (J)
1/11/2017	0.49	0.09 (J)				
1/17/2017					<0.1	
2/28/2017						0.09 (J)
3/1/2017		<0.1				
3/2/2017	0.48					
3/8/2017					<0.1	
4/26/2017	0.48	0.08 (J)				
5/2/2017					<0.1	
5/9/2017						0.009 (J)
6/28/2017	0.47	0.12 (J)				
7/7/2017					<0.1	
7/13/2017						<0.1
9/22/2017						0.09 (J)
9/29/2017						<0.1
10/4/2017	<0.1	<0.1				
10/5/2017					<0.1	
10/6/2017						<0.1
10/11/2017						<0.1
10/12/2017				<0.1		
11/21/2017				0.26 (J)		
1/11/2018				<0.1		
2/20/2018				0.45		
3/28/2018	0.56	<0.1				
3/30/2018					<0.1	<0.1
4/3/2018				0.31		
6/7/2018	0.48					
6/8/2018		0.2 (J)				
6/12/2018					<0.1	
6/13/2018						<0.1
6/29/2018				<0.1		
8/6/2018				0.23 (J)		
9/24/2018				<0.1		
9/26/2018					<0.1	<0.1
10/1/2018	0.44	<0.1				
10/16/2018			<0.1			
2/27/2019	0.53	0.13 (J)				
3/5/2019					<0.1	
3/6/2019						<0.1
4/1/2019	0.45	0.1 (J)				

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Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
4/4/2019					0.033 (J)	0.043 (J)
9/25/2019	0.46	0.1 (J)				
9/26/2019			<0.1		0.098 (J)	0.094 (J)
2/11/2020		0.094 (J)				
2/12/2020	0.4					
3/19/2020	0.51	0.11 (J)				
3/25/2020			<0.1			<0.1
3/26/2020					<0.1	
9/23/2020	0.47	0.098 (J)			<0.1	
9/24/2020			<0.1			
9/25/2020				<0.1		
10/7/2020						<0.1
2/9/2021				<0.1	<0.1	
2/10/2021	0.43	<0.1	<0.1			<0.1
3/3/2021	0.44	0.1			<0.1	
3/4/2021			<0.1	<0.1		<0.1

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Constituent: Lead (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.001	<0.001		
6/7/2016					<0.001			<0.001	<0.001
7/27/2016					<0.001	<0.001	<0.001	<0.001	
7/28/2016									<0.001
9/16/2016					<0.001		<0.001		
9/19/2016						<0.001		<0.001	<0.001
11/2/2016								0.0013 (J)	
11/3/2016					<0.001	<0.001	<0.001		<0.001
1/11/2017					<0.001	<0.001	<0.001		
1/13/2017								<0.001	<0.001
3/1/2017						<0.001	<0.001		
3/2/2017					8E-05 (J)				
3/6/2017								<0.001	<0.001
4/26/2017						<0.001	<0.001	<0.001	<0.001
5/2/2017					<0.001				
6/28/2017						<0.001	0.0001 (J)		
6/29/2017					8E-05 (J)			<0.001	<0.001
3/28/2018					<0.001	<0.001	<0.001		
3/29/2018								<0.001	<0.001
3/5/2019					<0.001		<0.001	<0.001	<0.001
3/6/2019						<0.001			
4/2/2019					<0.001				<0.001
4/3/2019						<0.001	<0.001	<0.001	
9/24/2019									<0.001
9/25/2019					<0.001			<0.001	
9/26/2019	<0.001					<0.001	<0.001		
2/11/2020					<0.001	<0.001	<0.001		
2/12/2020								<0.001	<0.001
3/24/2020					6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)	0.00011 (J)	<0.001
3/25/2020	<0.001								
9/23/2020		<0.001	0.00028 (J)		4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)		
9/24/2020	<0.001			0.00011 (J)				9.2E-05 (J)	4.6E-05 (J)
2/9/2021	0.00019 (J)	0.00011 (J)	0.00054 (J)	7.3E-05 (J)		5E-05 (J)	9.4E-05 (J)	6.3E-05 (J)	<0.001
3/3/2021	<0.001	8E-05 (J)	9.6E-05 (J)		<0.001	<0.001	7.6E-05 (J)	4.5E-05 (J)	
3/4/2021				4.1E-05 (J)					<0.001

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Constituent: Lead (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.001	<0.001	<0.001				
6/7/2016						0.00044 (J)			
7/26/2016			<0.001	<0.001	<0.001				
7/28/2016						<0.001			
8/30/2016									<0.001
9/14/2016			<0.001	<0.001	<0.001				
9/20/2016						<0.001			
11/2/2016			<0.001	<0.001					
11/4/2016					<0.001				
11/8/2016						<0.001			
11/16/2016									0.0002 (J)
1/12/2017				<0.001	<0.001				
1/13/2017			<0.001						
1/16/2017						<0.001			
2/27/2017									<0.001
3/6/2017			<0.001						
3/7/2017				0.0001 (J)	7E-05 (J)				
3/9/2017						<0.001			
5/1/2017			<0.001	<0.001					
5/2/2017					<0.001	<0.001			
5/10/2017									9E-05 (J)
6/27/2017				<0.001	<0.001				
6/29/2017			<0.001						
7/10/2017						<0.001			
7/11/2017									<0.001
10/11/2017	0.0001 (J)								
10/12/2017		9E-05 (J)					0.0001 (J)	<0.001	<0.001
11/20/2017	<0.001	<0.001					0.0001 (J)		
11/21/2017								<0.001	
1/10/2018		<0.001							
1/11/2018	0.0002 (J)							7E-05 (J)	
1/12/2018							0.0001 (J)		
2/19/2018		<0.001						<0.001	
2/20/2018	<0.001						<0.001		
3/29/2018			<0.001	<0.001	<0.001				
3/30/2018						<0.001			
4/3/2018	<0.001	<0.001					<0.001	<0.001	
4/4/2018									<0.001
6/27/2018								0.0011 (J)	
6/28/2018	<0.001	<0.001					<0.001		
8/7/2018	<0.001	<0.001					<0.001	<0.001	
9/20/2018									<0.001
9/24/2018	<0.001	<0.001					<0.001	<0.001	
3/4/2019			<0.001	<0.001	<0.001				
3/6/2019						<0.001			
4/3/2019			<0.001	<0.001	<0.001				
4/4/2019						<0.001			
8/21/2019	<0.001	<0.001							
8/22/2019							<0.001	6.7E-05 (J)	<0.001
9/24/2019				<0.001	9E-05 (J)				
9/25/2019			<0.001						
9/27/2019						0.00013 (J)			

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Constituent: Lead (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
10/9/2019	<0.001	<0.001					<0.001	0.00012 (J)	<0.001
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001				
3/24/2020		<0.001		5.4E-05 (J)	6.8E-05 (J)				
3/25/2020	5.1E-05 (J)		<0.001				<0.001	<0.001	4.7E-05 (J)
3/26/2020						<0.001			
9/22/2020			<0.001	4.5E-05 (J)	4.2E-05 (J)				
9/24/2020	<0.001	3.8E-05 (J)				4.6E-05 (J)			<0.001
9/25/2020							<0.001	<0.001	
2/8/2021				0.00013 (J)	3.7E-05 (J)				
2/9/2021			<0.001			<0.001	<0.001		
2/10/2021	<0.001	<0.001						0.0002 (J)	5.4E-05 (J)
3/2/2021				5.1E-05 (J)	9.2E-05 (J)				
3/3/2021			<0.001						
3/4/2021	<0.001	<0.001				0.00021 (J)	<0.001	<0.001	<0.001

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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.001
7/26/2016					<0.001	<0.001			
8/30/2016			<0.001						
8/31/2016	<0.001			<0.001					
9/1/2016		<0.001							
9/13/2016						0.0001 (J)	<0.001		
9/14/2016								<0.001	
9/15/2016					<0.001				
9/19/2016									<0.001
11/1/2016						<0.001			<0.001
11/2/2016					<0.001				
11/4/2016							<0.001	<0.001	
11/14/2016			<0.001						
11/15/2016		<0.001							
11/16/2016	<0.001								
11/28/2016				<0.001					
12/15/2016								<0.001	
1/10/2017					<0.001				
1/11/2017						<0.001			
1/16/2017							<0.001	<0.001	<0.001
2/21/2017									<0.001
2/22/2017				<0.001					
2/24/2017	<0.001		<0.001						
2/27/2017		<0.001							
3/2/2017						0.0001 (J)	<0.001		
3/3/2017								<0.001	
3/8/2017					0.0001 (J)				
4/26/2017					<0.001				<0.001
4/27/2017						<0.001	<0.001		
4/28/2017								<0.001	
5/8/2017			<0.001	<0.001					

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Constituent: Lead (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.001							
5/10/2017	8E-05 (J)								
5/26/2017								<0.001	
6/27/2017						<0.001	<0.001		
6/28/2017								<0.001	
6/30/2017					<0.001				<0.001
7/11/2017	<0.001		<0.001						
7/13/2017		<0.001							
7/17/2017				<0.001					
10/10/2017			<0.001						
10/11/2017		<0.001							
10/12/2017	<0.001								
10/16/2017				<0.001					
2/19/2018				<0.001					
3/27/2018					<0.001		<0.001		<0.001
3/28/2018								<0.001	
3/29/2018						<0.001			
4/2/2018			<0.001						
4/4/2018	<0.001	<0.001							
8/6/2018				<0.001					
9/19/2018			<0.001						
9/20/2018	<0.001	<0.001							
2/25/2019				<0.001					
2/26/2019					<0.001				<0.001
2/27/2019						<0.001	<0.001	<0.001	
6/12/2019				<0.001					
8/19/2019				<0.001					
8/20/2019			<0.001						
8/21/2019	<0.001								
9/26/2019		<0.001							
10/8/2019				<0.001					
10/9/2019	<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	<0.001
3/25/2020	7.5E-05 (J)	5.9E-05 (J)							
8/26/2020				<0.001					
8/27/2020			<0.001						
9/22/2020			<0.001	0.0001 (J)					
9/23/2020						<0.001	0.00021 (J)	0.0011 (J)	
9/24/2020		<0.001							<0.001
9/25/2020	<0.001				<0.001				
2/9/2021	<0.001	<0.001							
2/10/2021					4.8E-05 (J)			0.00015 (J)	
2/11/2021									4.6E-05 (J)
2/12/2021						4.4E-05 (J)	0.00038 (J)		
3/1/2021			<0.001						<0.001
3/2/2021				<0.001	<0.001				
3/3/2021						5.6E-05 (J)	<0.001	<0.001	

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Constituent: Lead (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
3/4/2021	<0.001	<0.001							

Time Series

Constituent: Lead (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.001				
6/2/2016	0.00056 (J)					
6/8/2016					<0.001	
7/25/2016		<0.001				
7/26/2016	0.0001 (J)					
8/1/2016					<0.001	
9/2/2016						0.0017 (J)
9/14/2016		<0.001				
9/15/2016	0.0002 (J)					
9/20/2016					<0.001	
11/1/2016	<0.001	<0.001				
11/8/2016					<0.001	
11/14/2016						0.0002 (J)
1/11/2017	<0.001	<0.001				
1/17/2017					<0.001	
2/28/2017						0.0003 (J)
3/1/2017		<0.001				
3/2/2017	0.0002 (J)					
3/8/2017					<0.001	
4/26/2017	<0.001	<0.001				
5/2/2017					<0.001	
5/9/2017						0.0004 (J)
6/28/2017	<0.001	<0.001				
7/7/2017					<0.001	
7/13/2017						0.0004 (J)
9/22/2017						0.0003 (J)
9/29/2017						0.0002 (J)
10/6/2017						0.0002 (J)
10/12/2017				0.0002 (J)		
11/21/2017				0.0002 (J)		
1/11/2018				0.0001 (J)		
2/20/2018				<0.001		
3/28/2018	<0.001	<0.001				
3/30/2018					<0.001	<0.001
4/3/2018				<0.001		
6/29/2018				<0.001		
8/6/2018				<0.001		
9/24/2018				<0.001		
2/27/2019	<0.001	<0.001				
3/5/2019					<0.001	
3/6/2019						<0.001
4/4/2019					<0.001	0.00037 (J)
9/26/2019			<0.001		<0.001	0.00023 (J)
2/11/2020		<0.001				
2/12/2020	<0.001					
3/19/2020	0.00017 (J)	<0.001				
3/25/2020			<0.001			0.0001 (J)
3/26/2020					5.3E-05 (J)	
9/23/2020	<0.001	0.00015 (J)			<0.001	
9/24/2020			<0.001			
9/25/2020				8.5E-05 (J)		
10/7/2020						0.00077 (J)

Time Series

Constituent: Lead (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/9/2021				8.8E-05 (J)	0.00036 (J)	
2/10/2021	<0.001	<0.001	8.7E-05 (J)			0.00051 (J)
3/3/2021	<0.001	<0.001			<0.001	
3/4/2021			0.00015 (J)	<0.001		0.00025 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						0.0088	0.015		
6/7/2016					<0.03			<0.03	0.0055
7/27/2016					<0.03	0.0087 (J)	0.0049 (J)	<0.03	
7/28/2016									0.0045 (J)
9/16/2016					<0.03		0.0031 (J)		
9/19/2016						0.0043 (J)		<0.03	0.0054 (J)
11/2/2016								<0.03	
11/3/2016					<0.03	<0.03	0.0021 (J)		<0.03
1/11/2017					0.0035 (J)	0.0052 (J)	0.0025 (J)		
1/13/2017								<0.03	0.0062 (J)
3/1/2017						0.0053 (J)	0.0029 (J)		
3/2/2017					<0.03				
3/6/2017								<0.03	0.0059 (J)
4/26/2017						0.0041 (J)	0.0019 (J)	<0.03	0.0054 (J)
5/2/2017					<0.03				
6/28/2017						0.0039 (J)	0.0016 (J)		
6/29/2017					<0.03			<0.03	0.0047 (J)
3/28/2018					<0.03	0.0041 (J)	0.0024 (J)		
3/29/2018								<0.03	0.0062 (J)
6/5/2018									0.0061 (J)
6/6/2018								<0.03	
6/7/2018						0.0032 (J)			
6/11/2018					<0.03		0.0014 (J)		
9/25/2018					<0.03	0.0036 (J)	0.0016 (J)	<0.03	0.0062 (J)
10/16/2018	0.0052 (J)								
3/5/2019					<0.03		0.0031 (J)	<0.03	0.0053 (J)
3/6/2019						0.0033 (J)			
4/2/2019					<0.03				0.0051 (J)
4/3/2019						0.0035 (J)	0.0028 (J)	<0.03	
9/24/2019									0.0068 (J)
9/25/2019					<0.03			<0.03	
9/26/2019	<0.03					0.0032 (J)	0.0029 (J)		
2/11/2020					<0.03	0.0033 (J)	0.005 (J)		
2/12/2020								<0.03	0.0065 (J)
3/24/2020					0.0034 (J)	0.0033 (J)	0.0035 (J)	<0.03	0.0064 (J)
3/25/2020	0.0011 (J)								
9/23/2020		<0.03	0.03 (J)		<0.03	0.003 (J)	0.0022 (J)		
9/24/2020	0.011 (J)			0.013 (J)				<0.03	0.0069 (J)
2/9/2021	0.021 (J)	<0.03	0.018 (J)	0.016 (J)		0.0031 (J)	0.0019 (J)	<0.03	0.006 (J)
3/3/2021	0.022 (J)	<0.03	0.02 (J)		<0.03	0.0034 (J)	0.0021 (J)	<0.03	
3/4/2021				0.016 (J)					0.0062 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			0.013	0.0049 (J)	<0.03				
6/7/2016						<0.03			
7/26/2016			0.0123 (J)	0.0063 (J)	0.0027 (J)				
7/28/2016						0.0019 (J)			
8/30/2016									0.0257 (J)
9/14/2016			0.0137 (J)	0.0058 (J)	0.0029 (J)				
9/20/2016						0.0021 (J)			
11/2/2016			0.0136 (J)	0.0053 (J)					
11/4/2016					<0.03				
11/8/2016						0.0024 (J)			
11/16/2016									0.0221 (J)
1/12/2017				0.0054 (J)	0.0032 (J)				
1/13/2017			0.0121 (J)						
1/16/2017						0.0022 (J)			
2/27/2017									0.0208 (J)
3/6/2017			0.0143 (J)						
3/7/2017				0.0056 (J)	0.0035 (J)				
3/9/2017						0.0025 (J)			
5/1/2017			0.0132 (J)	0.0031 (J)					
5/2/2017					0.0031 (J)	0.0019 (J)			
5/10/2017									0.0316 (J)
6/27/2017				0.0018 (J)	0.0029 (J)				
6/29/2017			0.0145 (J)						
7/10/2017						0.0018 (J)			
7/11/2017									0.0281 (J)
10/11/2017	0.0018 (J)								
10/12/2017		<0.03					0.0095 (J)	0.004 (J)	0.0331 (J)
11/20/2017	0.0018 (J)	<0.03					0.0083 (J)		
11/21/2017								0.0043 (J)	
1/10/2018		<0.03							
1/11/2018	0.0019 (J)							0.0044 (J)	
1/12/2018							0.0089 (J)		
2/19/2018		<0.03						<0.03	
2/20/2018	<0.03						0.0082 (J)		
3/29/2018			0.014 (J)	0.0058 (J)	0.0034 (J)				
3/30/2018						0.0039 (J)			
4/3/2018	0.0022 (J)	<0.03					0.0097 (J)	0.0047 (J)	
4/4/2018									0.037 (J)
6/6/2018				0.0068 (J)					
6/7/2018			0.013 (J)		0.0032 (J)				
6/12/2018						0.0017 (J)			
6/27/2018								0.0042 (J)	
6/28/2018	0.0026 (J)	<0.03					0.0093 (J)		
8/7/2018	0.0024 (J)	<0.03					0.0092 (J)	0.0038 (J)	
9/20/2018									0.049 (J)
9/24/2018	0.0022 (J)	<0.03					0.0083 (J)	0.0037 (J)	
9/26/2018			0.014 (J)	0.0065 (J)	0.0032 (J)				
9/27/2018						0.0017 (J)			
3/4/2019			0.015 (J)	0.0065 (J)	0.0032 (J)				
3/6/2019						0.0025 (J)			
4/3/2019			0.014 (J)	0.007 (J)	0.0035 (J)				
4/4/2019						0.0018 (J)			

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	0.0035 (J)	<0.03							
8/22/2019							0.0082 (J)	0.0035 (J)	0.047
9/24/2019				0.0065 (J)	0.0031 (J)				
9/25/2019			0.014 (J)						
9/27/2019						0.0017 (J)			
10/9/2019	0.0036 (J)	<0.03					0.0081 (J)	0.0032 (J)	0.037
2/12/2020	0.0041 (J)	<0.03	0.011 (J)	0.0066 (J)	0.0032 (J)				
3/24/2020		<0.03		0.0064 (J)	0.0033 (J)				
3/25/2020	0.0049 (J)		0.014 (J)				0.0081 (J)	0.0029 (J)	0.045
3/26/2020						0.0021 (J)			
9/22/2020			0.013 (J)	0.0066 (J)	0.0034 (J)				
9/24/2020	0.0054 (J)	<0.03				0.0035 (J)			0.05
9/25/2020							0.0069 (J)	0.0025 (J)	
2/8/2021				0.0063 (J)	0.0032 (J)				
2/9/2021			0.011 (J)			0.0026 (J)	0.0067 (J)		
2/10/2021	0.0071 (J)	<0.03						0.0021 (J)	0.058
3/2/2021				0.0018 (J)	0.0031 (J)				
3/3/2021			0.012 (J)						
3/4/2021	0.0084 (J)	<0.03				0.0026 (J)	0.0067 (J)	0.0021 (J)	0.059

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						0.015	<0.03		
6/2/2016					<0.03				<0.03
7/25/2016							0.002 (J)		<0.03
7/26/2016					<0.03	0.0135 (J)			
8/30/2016			0.0061 (J)						
8/31/2016	0.006 (J)			<0.03					
9/1/2016		0.0034 (J)							
9/13/2016						0.0112 (J)	<0.03		
9/14/2016								0.004 (J)	
9/15/2016					<0.03				
9/19/2016									<0.03
11/1/2016						0.0163 (J)			<0.03
11/2/2016					<0.03				
11/4/2016							<0.03	<0.03	
11/14/2016			0.0064 (J)						
11/15/2016		0.0044 (J)							
11/16/2016	0.0095 (J)								
11/28/2016				<0.03					
12/15/2016								0.0026 (J)	
1/10/2017					<0.03				
1/11/2017						0.0166 (J)			
1/16/2017							0.0023 (J)	0.0023 (J)	<0.03
2/21/2017									<0.03
2/22/2017				<0.03					
2/24/2017	0.0104 (J)		0.0049 (J)						
2/27/2017		0.0036 (J)							
3/2/2017						0.0159 (J)	0.0025 (J)		
3/3/2017								0.0013 (J)	
3/8/2017					<0.03				
4/26/2017					<0.03				<0.03
4/27/2017						0.0137 (J)	0.0027 (J)		
4/28/2017								0.0031 (J)	
5/8/2017			0.0053 (J)	0.0014 (J)					
5/9/2017		0.0038 (J)							
5/10/2017	0.0123 (J)								
5/26/2017								0.0038 (J)	
6/27/2017						0.0094 (J)	0.0024 (J)		
6/28/2017								0.0026 (J)	
6/30/2017					<0.03				<0.03
7/11/2017	0.0131 (J)		0.0051 (J)						
7/13/2017		0.0036 (J)							
7/17/2017				<0.03					
10/10/2017			0.0043 (J)						
10/11/2017		0.0036 (J)							
10/12/2017	0.013 (J)								
10/16/2017				0.0016 (J)					
2/19/2018				<0.03					
3/27/2018					<0.03		0.0023 (J)		0.0011 (J)
3/28/2018								0.0025 (J)	
3/29/2018						0.0078 (J)			
4/2/2018			0.0045 (J)						
4/4/2018	0.016 (J)	0.0039 (J)							

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						0.0079 (J)			
6/6/2018							0.0024 (J)		
6/7/2018								0.0017 (J)	
6/8/2018					<0.03				
6/11/2018									0.0012 (J)
8/6/2018				<0.03					
9/19/2018			0.0043 (J)						
9/20/2018	0.019 (J)	0.0036 (J)							
10/1/2018					<0.03	0.0053 (J)	0.0023 (J)	<0.03	
10/2/2018									<0.03
2/26/2019					<0.03				0.0011 (J)
2/27/2019						0.0093 (J)	0.0023 (J)	0.0011 (J)	
3/28/2019						0.013 (J)	0.0022 (J)		
3/29/2019					<0.03			0.0016 (J)	
4/1/2019									0.001 (J)
8/19/2019				0.0019 (J)					
8/20/2019			0.0036 (J)						
8/21/2019	0.015 (J)								
9/24/2019						0.0046 (J)	0.0023 (J)	0.0011 (J)	
9/25/2019					<0.03				0.0011 (J)
9/26/2019		0.0036 (J)							
10/8/2019			0.0036 (J)	0.0015 (J)					
10/9/2019	0.018 (J)								
2/10/2020						0.011 (J)	0.0023 (J)		
2/11/2020								0.0012 (J)	
2/12/2020					<0.03				0.0013 (J)
3/17/2020			0.0046 (J)	0.0017 (J)					
3/18/2020					<0.03		0.0024 (J)		
3/19/2020						0.013 (J)		0.0022 (J)	0.0012 (J)
3/25/2020	0.016 (J)	0.0037 (J)							
8/26/2020				0.0032 (J)					
8/27/2020			0.0039 (J)						
9/22/2020			0.0036 (J)	0.0029 (J)					
9/23/2020						0.014 (J)	0.0024 (J)	0.0016 (J)	
9/24/2020		0.0037 (J)							0.0011 (J)
9/25/2020	0.018 (J)				<0.03				
2/9/2021	0.024 (J)	0.0038 (J)							
2/10/2021					<0.03			0.0039 (J)	
2/11/2021									0.0012 (J)
2/12/2021						0.01 (J)	0.0025 (J)		
3/1/2021			0.0037 (J)						0.0011 (J)
3/2/2021				0.0033 (J)	<0.03				
3/3/2021						0.012 (J)	0.0025 (J)	0.0016 (J)	
3/4/2021	0.025 (J)	0.0035 (J)							

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		0.01				
6/2/2016	0.018					
6/8/2016					<0.03	
7/25/2016		0.0132 (J)				
7/26/2016	0.0221 (J)					
8/1/2016					<0.03	
9/2/2016						0.0029 (J)
9/14/2016		0.012 (J)				
9/15/2016	0.0197 (J)					
9/20/2016					<0.03	
11/1/2016	0.0194 (J)	0.0115 (J)				
11/8/2016					<0.03	
11/14/2016						0.0044 (J)
1/11/2017	0.0177 (J)	0.0085 (J)				
1/17/2017					<0.03	
2/28/2017						0.0038 (J)
3/1/2017		0.0114 (J)				
3/2/2017	0.0185 (J)					
3/8/2017					<0.03	
4/26/2017	0.0183 (J)	0.0092 (J)				
5/2/2017					<0.03	
5/9/2017						0.0057 (J)
6/28/2017	0.0173 (J)	0.0085 (J)				
7/7/2017					<0.03	
7/13/2017						0.007 (J)
9/22/2017						0.0067 (J)
9/29/2017						0.0064 (J)
10/6/2017						0.0065 (J)
10/12/2017				0.0271 (J)		
11/21/2017				0.0255 (J)		
1/11/2018				0.0271 (J)		
2/20/2018				<0.03		
3/28/2018	0.02 (J)	0.013 (J)				
3/30/2018					<0.03	0.0061 (J)
4/3/2018				0.027 (J)		
6/7/2018	0.02 (J)					
6/8/2018		0.012 (J)				
6/12/2018					<0.03	
6/13/2018						0.0065 (J)
6/29/2018				0.032 (J)		
8/6/2018				0.033 (J)		
9/24/2018				0.028 (J)		
9/26/2018					<0.03	0.0063 (J)
10/1/2018	0.02 (J)	0.011 (J)				
10/16/2018			0.0011 (J)			
2/27/2019	0.021 (J)	0.014 (J)				
3/5/2019					<0.03	
3/6/2019						0.0057 (J)
4/1/2019	0.021 (J)	0.013 (J)				
4/4/2019					<0.03	0.0058 (J)
9/25/2019	0.02 (J)	0.01 (J)				
9/26/2019			<0.03		<0.03	0.0041 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/11/2020		0.013 (J)				
2/12/2020	0.019 (J)					
3/19/2020	0.023 (J)	0.014 (J)				
3/25/2020			0.011 (J)			0.0032 (J)
3/26/2020					<0.03	
9/23/2020	0.023 (J)	0.013 (J)			<0.03	
9/24/2020			0.001 (J)			
9/25/2020				0.028 (J)		
10/7/2020						0.0014 (J)
2/9/2021				0.024 (J)	<0.03	
2/10/2021	0.023 (J)	0.015 (J)	0.0012 (J)			0.0011 (J)
3/3/2021	0.024 (J)	0.017 (J)			<0.03	
3/4/2021			0.0015 (J)	0.028 (J)		<0.03

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.0002	<0.0002		
6/7/2016					9.5E-05 (J)			9.6E-05 (J)	9.6E-05 (J)
7/27/2016					<0.0002	<0.0002	<0.0002	<0.0002	
7/28/2016									<0.0002
9/16/2016					<0.0002		<0.0002		
9/19/2016						<0.0002		<0.0002	<0.0002
11/2/2016								<0.0002	
11/3/2016					<0.0002	<0.0002	<0.0002		<0.0002
1/11/2017					<0.0002	<0.0002	<0.0002		
1/13/2017								<0.0002	<0.0002
3/1/2017						<0.0002	<0.0002		
3/2/2017					<0.0002				
3/6/2017								<0.0002	<0.0002
4/26/2017						<0.0002	<0.0002	<0.0002	<0.0002
5/2/2017					<0.0002				
6/28/2017						<0.0002	<0.0002		
6/29/2017					<0.0002			<0.0002	<0.0002
3/28/2018					<0.0002	<0.0002	<0.0002		
3/29/2018								<0.0002	<0.0002
9/25/2018					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
3/5/2019					<0.0002		<0.0002	<0.0002	<0.0002
3/6/2019						<0.0002			
2/11/2020					<0.0002	<0.0002	<0.0002		
2/12/2020								<0.0002	<0.0002
9/23/2020		<0.0002	<0.0002						
9/24/2020	<0.0002			<0.0002					
2/9/2021	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
3/3/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	
3/4/2021				<0.0002					<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.0002	<0.0002	<0.0002				
6/7/2016						9.8E-05 (J)			
7/26/2016			<0.0002	<0.0002	<0.0002				
7/28/2016						<0.0002			
8/30/2016									<0.0002
9/14/2016			<0.0002	<0.0002	<0.0002				
9/20/2016						<0.0002			
11/2/2016			<0.0002	<0.0002					
11/4/2016					<0.0002				
11/8/2016						<0.0002			
11/16/2016									<0.0002
1/12/2017				<0.0002	<0.0002				
1/13/2017			<0.0002						
1/16/2017						<0.0002			
2/27/2017									<0.0002
3/6/2017			<0.0002						
3/7/2017				<0.0002	<0.0002				
3/9/2017						<0.0002			
5/1/2017			<0.0002	<0.0002					
5/2/2017					<0.0002	<0.0002			
5/10/2017									<0.0002
6/27/2017				<0.0002	<0.0002				
6/29/2017			<0.0002						
7/10/2017						<0.0002			
7/11/2017									<0.0002
10/11/2017	<0.0002								
10/12/2017		<0.0002					<0.0002	<0.0002	<0.0002
11/20/2017	7E-05 (J)	8E-05 (J)					8E-05 (J)		
11/21/2017								6E-05 (J)	
1/10/2018		<0.0002							
1/11/2018	<0.0002							<0.0002	
1/12/2018							<0.0002		
2/19/2018		<0.0002						<0.0002	
2/20/2018	<0.0002						<0.0002		
3/29/2018			<0.0002	<0.0002	<0.0002				
3/30/2018						<0.0002			
4/3/2018	<0.0002	<0.0002					<0.0002	<0.0002	
4/4/2018									<0.0002
6/27/2018								<0.0002	
6/28/2018	<0.0002	3.6E-05 (J)					3.7E-05 (J)		
8/7/2018	<0.0002	<0.0002					<0.0002	<0.0002	
9/20/2018									4.8E-05 (J)
9/24/2018	<0.0002	<0.0002					<0.0002	<0.0002	
9/26/2018			<0.0002	<0.0002	<0.0002				
9/27/2018						<0.0002			
3/4/2019			<0.0002	<0.0002	<0.0002				
3/6/2019						<0.0002			
8/21/2019	<0.0002	<0.0002							
8/22/2019							<0.0002	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				
2/8/2021				<0.0002	<0.0002				
2/9/2021			<0.0002			0.00015 (J)	<0.0002		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
2/10/2021	<0.0002	<0.0002						<0.0002	<0.0002
3/2/2021				<0.0002	<0.0002				
3/3/2021			<0.0002						
3/4/2021	<0.0002	<0.0002				<0.0002	<0.0002	<0.0002	<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.0002
7/26/2016					<0.0002	<0.0002			
8/30/2016			<0.0002						
8/31/2016	<0.0002			<0.0002					
9/1/2016		<0.0002							
9/13/2016						<0.0002	<0.0002		
9/14/2016								<0.0002	
9/15/2016					<0.0002				
9/19/2016									<0.0002
11/1/2016						<0.0002			<0.0002
11/2/2016					<0.0002				
11/4/2016							<0.0002	<0.0002	
11/14/2016			<0.0002						
11/15/2016		<0.0002							
11/16/2016	<0.0002								
11/28/2016				<0.0002					
12/15/2016								<0.0002	
1/10/2017					<0.0002				
1/11/2017						<0.0002			
1/16/2017							<0.0002	<0.0002	<0.0002
2/21/2017									<0.0002
2/22/2017				<0.0002					
2/24/2017	<0.0002		<0.0002						
2/27/2017		<0.0002							
3/2/2017						<0.0002	<0.0002		
3/3/2017								<0.0002	
3/8/2017					<0.0002				
4/26/2017					<0.0002				<0.0002
4/27/2017						<0.0002	<0.0002		
4/28/2017								<0.0002	
5/8/2017			<0.0002	<0.0002					

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.0002							
5/10/2017	<0.0002								
5/26/2017								<0.0002	
6/27/2017						<0.0002	<0.0002		
6/28/2017								<0.0002	
6/30/2017					<0.0002				<0.0002
7/11/2017	<0.0002		<0.0002						
7/13/2017		<0.0002							
7/17/2017				<0.0002					
10/10/2017			<0.0002						
10/11/2017		<0.0002							
10/12/2017	<0.0002								
10/16/2017				<0.0002					
2/19/2018				<0.0002					
3/27/2018					<0.0002		<0.0002		<0.0002
3/28/2018								<0.0002	
3/29/2018						<0.0002			
4/2/2018			<0.0002						
4/4/2018	<0.0002	<0.0002							
8/6/2018				<0.0002					
9/19/2018			5.3E-05 (J)						
9/20/2018	5.2E-05 (J)	6.1E-05 (J)							
2/25/2019				7.4E-05 (J)					
2/26/2019					6.1E-05 (J)				6.8E-05 (J)
2/27/2019						5.1E-05 (J)	5.4E-05 (J)	<0.0002	
3/28/2019						4E-05 (J)	<0.0002		
3/29/2019					<0.0002			<0.0002	
4/1/2019									8.2E-05 (J)
6/12/2019				<0.0002					
8/19/2019				<0.0002					
8/20/2019			<0.0002						
8/21/2019	<0.0002								
9/24/2019						<0.0002	<0.0002	<0.0002	
9/25/2019					<0.0002				<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					
8/27/2020			<0.0002						
9/22/2020				<0.0002					
2/9/2021	<0.0002	0.00014 (J)							
2/10/2021					<0.0002			<0.0002	
2/11/2021									<0.0002
2/12/2021						<0.0002	<0.0002		
3/2/2021				<0.0002					
3/4/2021	<0.0002	<0.0002							

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.0002				
6/2/2016	<0.0002					
6/8/2016					<0.0002	
7/25/2016		<0.0002				
7/26/2016	<0.0002					
8/1/2016					<0.0002	
9/2/2016						<0.0002
9/14/2016		<0.0002				
9/15/2016	<0.0002					
9/20/2016					<0.0002	
11/1/2016	<0.0002	<0.0002				
11/8/2016					<0.0002	
11/14/2016						<0.0002
1/11/2017	<0.0002	<0.0002				
1/17/2017					<0.0002	
2/28/2017						<0.0002
3/1/2017		<0.0002				
3/2/2017	<0.0002					
3/8/2017					<0.0002	
4/26/2017	<0.0002	<0.0002				
5/2/2017					<0.0002	
5/9/2017						<0.0002
6/28/2017	<0.0002	<0.0002				
7/7/2017					<0.0002	
7/13/2017						<0.0002
9/22/2017						<0.0002
9/29/2017						<0.0002
10/6/2017						<0.0002
10/12/2017				<0.0002		
11/21/2017				6E-05 (J)		
1/11/2018				<0.0002		
2/20/2018				<0.0002		
3/28/2018	<0.0002	<0.0002				
3/30/2018					<0.0002	<0.0002
4/3/2018				<0.0002		
6/29/2018				<0.0002		
8/6/2018				<0.0002		
9/24/2018				<0.0002		
9/26/2018					<0.0002	<0.0002
2/27/2019	6.2E-05 (J)	6.1E-05 (J)				
3/5/2019					<0.0002	
3/6/2019						<0.0002
4/1/2019	9.6E-05 (J)	8.4E-05 (J)				
9/25/2019	<0.0002	<0.0002				
2/11/2020		<0.0002				
2/12/2020	<0.0002					
9/24/2020			<0.0002			
9/25/2020				<0.0002		
2/9/2021				<0.0002	<0.0002	
2/10/2021	<0.0002	<0.0002	<0.0002			<0.0002
3/3/2021					<0.0002	
3/4/2021			<0.0002	<0.0002		<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.01	<0.01		
6/7/2016					<0.01			<0.01	<0.01
7/27/2016					<0.01	<0.01	<0.01	<0.01	
7/28/2016									<0.01
9/16/2016					<0.01		<0.01		
9/19/2016						<0.01		<0.01	<0.01
11/2/2016								<0.01	
11/3/2016					<0.01	<0.01	<0.01		<0.01
1/11/2017					<0.01	<0.01	<0.01		
1/13/2017								<0.01	<0.01
3/1/2017						<0.01	<0.01		
3/2/2017					<0.01				
3/6/2017								<0.01	0.0007 (J)
4/26/2017						<0.01	<0.01	<0.01	0.0008 (J)
5/2/2017					<0.01				
6/28/2017						<0.01	<0.01		
6/29/2017					<0.01			<0.01	<0.01
3/28/2018					<0.01	<0.01	<0.01		
3/29/2018								<0.01	<0.01
3/5/2019					<0.01		<0.01	<0.01	<0.01
3/6/2019						<0.01			
2/11/2020					<0.01	<0.01	<0.01		
2/12/2020								<0.01	<0.01
3/24/2020					<0.01	<0.01	<0.01	<0.01	<0.01
3/25/2020	<0.01								
9/23/2020		<0.01	0.0068 (J)		<0.01	<0.01	<0.01		
9/24/2020	0.0022 (J)			<0.01				<0.01	<0.01
2/9/2021	0.0038 (J)	<0.01	0.0068 (J)	<0.01		<0.01	<0.01	<0.01	<0.01
3/3/2021	0.0037 (J)	<0.01	0.0049 (J)		<0.01	<0.01	<0.01	<0.01	
3/4/2021				<0.01					<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.01	0.0035 (J)	<0.01				
6/7/2016						<0.01			
7/26/2016			<0.01	0.0042 (J)	<0.01				
7/28/2016						<0.01			
8/30/2016									0.0019 (J)
9/14/2016			<0.01	0.0041 (J)	<0.01				
9/20/2016						<0.01			
11/2/2016			<0.01	0.0039 (J)					
11/4/2016					<0.01				
11/8/2016						<0.01			
11/16/2016									0.0027 (J)
1/12/2017				0.0041 (J)	<0.01				
1/13/2017			<0.01						
1/16/2017						<0.01			
2/27/2017									0.0031 (J)
3/6/2017			<0.01						
3/7/2017				0.0047 (J)	<0.01				
3/9/2017						<0.01			
5/1/2017			<0.01	0.0045 (J)					
5/2/2017					<0.01	<0.01			
5/10/2017									0.0017 (J)
6/27/2017				0.004 (J)	<0.01				
6/29/2017			<0.01						
7/10/2017						<0.01			
7/11/2017									0.0014 (J)
10/11/2017	0.0094 (J)								
10/12/2017		<0.01					<0.01	<0.01	<0.01
11/20/2017	0.0081 (J)	<0.01					<0.01		
11/21/2017								<0.01	
1/10/2018		<0.01							
1/11/2018	0.0074 (J)							<0.01	
1/12/2018							<0.01		
2/19/2018		<0.01						<0.01	
2/20/2018	<0.01						<0.01		
3/29/2018			<0.01	<0.01	<0.01				
3/30/2018						<0.01			
4/3/2018	0.006 (J)	<0.01					<0.01	<0.01	
4/4/2018									<0.01
6/27/2018								<0.01	
6/28/2018	0.005 (J)	<0.01					<0.01		
8/7/2018	0.0045 (J)	<0.01					<0.01	<0.01	
9/20/2018									<0.01
9/24/2018	0.0035 (J)	<0.01					<0.01	<0.01	
3/4/2019			<0.01	<0.01	<0.01				
3/6/2019						<0.01			
8/21/2019	0.0021 (J)	<0.01							
8/22/2019							<0.01	<0.01	<0.01
10/9/2019	0.0018 (J)	<0.01					<0.01	<0.01	<0.01
2/12/2020	0.0025 (J)	<0.01	<0.01	0.0011 (J)	<0.01				
3/24/2020		<0.01		0.0011 (J)	<0.01				
3/25/2020	0.002 (J)		<0.01				<0.01	<0.01	<0.01
3/26/2020						<0.01			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
9/22/2020			<0.01	0.00099 (J)	<0.01				
9/24/2020	0.0016 (J)	<0.01				<0.01			0.00091 (J)
9/25/2020							<0.01	<0.01	
2/8/2021				0.0011 (J)	<0.01				
2/9/2021			<0.01			<0.01	<0.01		
2/10/2021	0.0013 (J)	<0.01						<0.01	0.00094 (J)
3/2/2021				<0.01	<0.01				
3/3/2021			<0.01						
3/4/2021	0.0014 (J)	<0.01				<0.01	<0.01	<0.01	0.00085 (J)

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Constituent: Molybdenum (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						0.014 (J)	0.012 (J)		
6/2/2016					<0.01				<0.01
7/25/2016							0.0098 (J)		<0.01
7/26/2016					<0.01	0.0132			
8/30/2016			<0.01						
8/31/2016	0.0022 (J)			<0.01					
9/1/2016		<0.01							
9/13/2016						0.0127	0.01 (J)		
9/14/2016								0.0039 (J)	
9/15/2016					<0.01				
9/19/2016									<0.01
11/1/2016						0.0092 (J)			<0.01
11/2/2016					<0.01				
11/4/2016							0.01	0.0077 (J)	
11/14/2016			<0.01						
11/15/2016		<0.01							
11/16/2016	<0.01								
11/28/2016				<0.01					
12/15/2016								0.0066 (J)	
1/10/2017					<0.01				
1/11/2017						0.0093 (J)			
1/16/2017							0.0086 (J)	0.0056 (J)	<0.01
2/21/2017									<0.01
2/22/2017				<0.01					
2/24/2017	<0.01		<0.01						
2/27/2017		0.0007 (J)							
3/2/2017						0.0099 (J)	0.01		
3/3/2017								0.0049 (J)	
3/8/2017					<0.01				
4/26/2017					<0.01				<0.01
4/27/2017						0.0103	0.0101		
4/28/2017								0.004 (J)	
5/8/2017			<0.01	<0.01					
5/9/2017		<0.01							
5/10/2017	<0.01								
5/26/2017								0.0029 (J)	
6/27/2017						0.0097 (J)	0.0093 (J)		
6/28/2017								0.0036 (J)	
6/30/2017					<0.01				<0.01
7/11/2017	<0.01		<0.01						
7/13/2017		<0.01							
7/17/2017				<0.01					
10/10/2017			<0.01						
10/11/2017		<0.01							
10/12/2017	<0.01								
10/16/2017				<0.01					
2/19/2018				<0.01					
3/27/2018					<0.01		0.0074 (J)		<0.01
3/28/2018								0.0038 (J)	
3/29/2018						0.0076 (J)			
4/2/2018			<0.01						
4/4/2018	<0.01	<0.01							

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						0.0092 (J)			
6/6/2018							0.0073 (J)		
6/7/2018								0.004 (J)	
6/8/2018					<0.01				
6/11/2018									<0.01
8/6/2018				<0.01					
9/19/2018			<0.01						
9/20/2018	<0.01	<0.01							
10/1/2018					<0.01	0.0085 (J)	0.0076 (J)	0.0042 (J)	
10/2/2018									<0.01
2/26/2019					<0.01				<0.01
2/27/2019						0.0087 (J)	0.0078 (J)	0.0041 (J)	
3/28/2019						0.0092 (J)	0.0082 (J)		
3/29/2019					<0.01			0.0041 (J)	
4/1/2019									<0.01
8/19/2019				<0.01					
8/20/2019			<0.01						
8/21/2019	0.0012 (J)								
9/24/2019						0.0072 (J)	0.0074 (J)	0.0054 (J)	
9/25/2019					<0.01				<0.01
10/8/2019			<0.01						
10/9/2019	0.0012 (J)								
2/10/2020						0.0087 (J)	0.0062 (J)		
2/11/2020								0.0057 (J)	
2/12/2020					<0.01				<0.01
3/17/2020			<0.01						
3/18/2020					<0.01		0.0056 (J)		
3/19/2020						0.0088 (J)		0.0046 (J)	<0.01
3/25/2020	0.0015 (J)	<0.01							
8/26/2020				<0.01					
8/27/2020			<0.01						
9/22/2020			<0.01						
9/23/2020						0.008 (J)	0.0059 (J)	0.0071 (J)	
9/24/2020		<0.01							<0.01
9/25/2020	0.0011 (J)				<0.01				
2/9/2021	0.0012 (J)	<0.01							
2/10/2021					<0.01			0.0041 (J)	
2/11/2021									<0.01
2/12/2021						0.008 (J)	0.0056 (J)		
3/1/2021			<0.01						<0.01
3/2/2021					<0.01				
3/3/2021						0.0088 (J)	0.0049 (J)	0.0074 (J)	
3/4/2021	0.0011 (J)	<0.01							

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		0.0055 (J)				
6/2/2016	0.0093 (J)					
6/8/2016					<0.01	
7/25/2016		0.0037 (J)				
7/26/2016	0.0113					
8/1/2016					<0.01	
9/2/2016						0.0027 (J)
9/14/2016		0.0034 (J)				
9/15/2016	0.0112					
9/20/2016					<0.01	
11/1/2016	0.0099 (J)	0.0025 (J)				
11/8/2016					<0.01	
11/14/2016						0.0071 (J)
1/11/2017	0.0093 (J)	0.0033 (J)				
1/17/2017					<0.01	
2/28/2017						0.0038 (J)
3/1/2017		0.0044 (J)				
3/2/2017	0.0103					
3/8/2017					<0.01	
4/26/2017	0.01	0.0075 (J)				
5/2/2017					<0.01	
5/9/2017						0.0025 (J)
6/28/2017	0.0102	0.008 (J)				
7/7/2017					<0.01	
7/13/2017						0.0014 (J)
9/22/2017						<0.01
9/29/2017						<0.01
10/6/2017						<0.01
10/12/2017				0.0022 (J)		
11/21/2017				0.0016 (J)		
1/11/2018				0.0015 (J)		
2/20/2018				<0.01		
3/28/2018	0.011	0.0025 (J)				
3/30/2018					<0.01	<0.01
4/3/2018				<0.01		
6/7/2018	0.011					
6/8/2018		0.0041 (J)				
6/29/2018				0.0021 (J)		
8/6/2018				<0.01		
9/24/2018				<0.01		
10/1/2018	0.012	0.0037 (J)				
2/27/2019	0.011	0.0027 (J)				
3/5/2019					<0.01	
3/6/2019						<0.01
4/1/2019	0.012	0.0021 (J)				
9/25/2019	0.012	0.0087 (J)				
2/11/2020		0.003 (J)				
2/12/2020	0.013					
3/19/2020	0.013	0.0043 (J)				
3/25/2020			0.0019 (J)			<0.01
3/26/2020					<0.01	
9/23/2020	0.012	0.01			<0.01	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
9/24/2020			<0.01			
9/25/2020				0.0016 (J)		
10/7/2020						0.0015 (J)
2/9/2021				0.0016 (J)	<0.01	
2/10/2021	0.014	0.0038 (J)	<0.01			<0.01
3/3/2021	0.013	0.0036 (J)			<0.01	
3/4/2021			<0.01	0.0024 (J)		<0.01

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						6.17	5.71		
6/7/2016					5.62			5.77	6.1
7/27/2016					5.59	6.14	5.46	5.79	
7/28/2016									6.12
9/16/2016					5.58				
9/19/2016						6.04	5.59	5.73	6.12
11/2/2016								5.67	
11/3/2016					5.59	5.97	5.39		6.07
1/11/2017					5.59	6.05	5.48		
1/13/2017								5.79	6.41
3/1/2017						5.94	5.41		
3/2/2017					5.54				
3/6/2017								5.63	6.34
4/26/2017						5.99	5.4	5.66	6.32
5/2/2017					5.47				
6/28/2017						6	5.36		
6/29/2017					5.56			5.85	6.47
10/3/2017									6.56
10/4/2017					5.57		5.32	5.83	
10/5/2017						6.11			
3/28/2018					5.59	6.1	5.34		
3/29/2018								5.93	6.75
6/5/2018									6.09
6/6/2018								5.86	
6/7/2018						5.98			
6/11/2018					5.58		5.28		
9/25/2018					5.59	5.81	4.86	5.84	6.67
3/5/2019					5.48		5.26	6.07	7.22
3/6/2019						5.99			
4/2/2019					5.74				6.94
4/3/2019						6.29	5.47	5.71	
9/24/2019									6.87
9/25/2019					5.49			5.86	
9/26/2019						6.04	5.2		
1/3/2020	5.78								
1/15/2020		6.25		5.64					
1/16/2020			6.47						
2/11/2020				5.37	5.58	6.07	5.3		
2/12/2020								6	7.13
3/24/2020					5.57	5.98	5.33	5.86	6.35
3/25/2020	6.13								
9/23/2020		5.66	5.89		5.58 (D)	6.01 (D)	5.29 (D)		
9/24/2020	6			5.38				5.8 (D)	6.7 (D)
2/9/2021	6.42	5.81	6.96	5.34		6.12	5.43	5.86	6.95
3/3/2021	6.54	5.67	6.8		5.52	5.89	5.31	5.89	
3/4/2021				5.32					6.8

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			6.36	7.67	5.75				
6/7/2016						5.57			
7/26/2016			6.22	7.66	5.72				
7/28/2016						5.6			
8/30/2016									5.64
9/14/2016			6.23	7.6	5.74				
9/20/2016						5.53			
11/2/2016			6.08	7.35					
11/4/2016					5.61				
11/8/2016						5.53			
11/16/2016									6.21
1/12/2017				7.49	5.71				
1/13/2017			6.19						
1/16/2017						5.59			
2/27/2017									6.09
3/6/2017			6.2						
3/7/2017				7.43	5.66				
3/9/2017						5.56			
5/1/2017			6.21	7.22					
5/2/2017					5.65	5.61			
5/10/2017									5.79
6/27/2017				7.32	5.7				
6/29/2017			6.21						
7/10/2017						5.68			
7/11/2017									5.45
10/3/2017				7.48	5.79				
10/5/2017			6.16						
10/11/2017	6.4					5.46			
10/12/2017		5.43					4.85	4.94	5.48
11/20/2017	6.33	5.1					4.87		
11/21/2017								4.69	
1/10/2018		4.97							
1/11/2018	6.29							4.73	
1/12/2018							4.78		
2/19/2018		5.6						4.96	
2/20/2018	7.22						5.1		
3/29/2018			6.09	7.02	5.63				
3/30/2018						5.73			
4/3/2018	6.87	5.84					4.76	5.31	
4/4/2018									5.93
6/6/2018				7.43					
6/7/2018			6.12		5.63				
6/12/2018						5.63			
6/27/2018								4.78	
6/28/2018	6.18	5.24					4.75		
8/7/2018	6.08	5.18					4.72	4.77	
9/20/2018									5.63
9/24/2018	5.81	5.14					4.67	4.78	
9/26/2018			5.84	7.13	5.63				
9/27/2018						5.47			
3/4/2019			6.18	7.46	5.75				
3/6/2019						5.84			

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
3/26/2019		5.3							
3/27/2019	5.84						4.79		5.57
3/28/2019								5	
4/3/2019			6.43	7.11	5.63				
4/4/2019						5.64			
8/21/2019	5.96	5.26							
8/22/2019							4.81	4.89	5.61
9/24/2019				6.93	5.6				
9/25/2019			6.2						
9/27/2019						5.77			
10/9/2019	5.81	5.22					4.8	4.86	5.5
2/12/2020	5.97	5.3	6.15	7.52	5.83				
3/24/2020		5.29		7.34	5.81				
3/25/2020	5.78		6.26				4.89	4.87	5.53
3/26/2020						5.69			
9/22/2020			5.8 (D)	7.19 (D)	5.99 (D)				
9/24/2020	5.7 (D)	5.43 (D)				5.51			5.55
9/25/2020							4.9	4.95	
2/8/2021					5.67				
2/9/2021			6.06			5.61	5.04		
2/10/2021	5.8	5.19						4.98	5.65
3/2/2021				7.15	5.63				
3/3/2021			6.21						
3/4/2021	5.54	5.23				5.44	5.01	4.69	5.59

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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					5.46				5.75
7/25/2016							6.21		5.82
7/26/2016					5.45	7.43			
8/30/2016			5.75						
8/31/2016	7.27								
9/1/2016		5.78							
9/13/2016						7.44	6.16	7.41	
9/15/2016					5.45				
9/19/2016									5.78 (D)
11/1/2016						7.24			5.62
11/2/2016					5.41				
11/4/2016							6.29	7.12	
11/14/2016			5.59						
11/15/2016		5.81							
11/16/2016	6.79								
11/28/2016				6.23					
12/15/2016								7.24	
1/10/2017					5.37				
1/11/2017						7.3			
1/16/2017							6.29	7.24	5.72
2/21/2017									5.67
2/22/2017				6.21					
2/24/2017	6.39		5.49						
2/27/2017		5.68							
3/2/2017						7.23	6.28		
3/3/2017								7.22	
3/8/2017					5.41				
4/26/2017					5.02				5.56
4/27/2017						6.99	6.09		
4/28/2017								7.21	
5/8/2017			5.58	6.12					
5/9/2017		6.18							
5/10/2017	6.5								
5/26/2017								7.13	
6/27/2017						6.87	6.21		
6/28/2017								7.06	
6/30/2017					5.39				5.72
7/11/2017	6.32		5.58						

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
7/13/2017		5.6							
7/17/2017				6.03					
10/3/2017						6.81	5.98	6.99	
10/4/2017									5.87
10/5/2017					5.49				
10/10/2017			5.49						
10/11/2017		5.61							
10/12/2017	5.97								
10/16/2017				6.12					
2/19/2018				6.13					
3/27/2018					5.47		6.25		5.83
3/28/2018								7.3	
3/29/2018						7.38			
4/2/2018			6.3 (O)						
4/4/2018	6.41	5.98							
6/5/2018						7.16			
6/6/2018							6.17		
6/7/2018								7.29	
6/8/2018					5.45				
6/11/2018									5.69
8/6/2018				6.01					
9/19/2018			5.48						
9/20/2018	5.69	5.67							
10/1/2018					5.39	6.8	5.9	7.07	
10/2/2018									5.39
2/25/2019				6.51					
2/26/2019					5.46				5.77
2/27/2019						6.84	5.8	7.27	
3/27/2019			5.83						
3/28/2019	5.96	5.86				6.99	6.15		
3/29/2019					5.34			7.06	
4/1/2019									5.62
6/12/2019				6.3					
8/19/2019				6.23					
8/20/2019			5.58						
8/21/2019	5.84								
9/24/2019						7.07	6.23	7.01	
9/25/2019					5.19				5.69
9/26/2019		5.6							
10/8/2019			5.59	6.28					
10/9/2019	5.78								
2/10/2020						7.2	6.1		
2/11/2020								7.38	
2/12/2020					5.48				5.8
3/17/2020			5.57	6.14					
3/18/2020					5.38		6.19		
3/19/2020						7.03		7.22	6
3/25/2020	5.79	5.69							
5/6/2020				6.24					
8/26/2020				5.67					
8/27/2020			4.88						
9/22/2020			5.46	5.78					

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
9/23/2020						7.15	6.01	7.22	
9/24/2020		5.62							5.67
9/25/2020	5.75				5.44				
2/9/2021	5.86	5.79							
2/10/2021					5.35			7.29	
2/11/2021									5.73
2/12/2021						7.14	6.21		
3/1/2021			5.48						5.78
3/2/2021				5.42	5.49				
3/3/2021						7.2	5.38	7.92	
3/4/2021	5.88	5.88							

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		7.72				
6/2/2016	7.84					
6/8/2016					5.65	
7/25/2016		7.74				
7/26/2016	7.88					
8/1/2016					5.47	
9/2/2016						5.84
9/14/2016		7.65				
9/15/2016	7.74					
9/20/2016					5.61	
11/1/2016	7.75	7.7				
11/8/2016					5.55	
11/14/2016						6.28
1/11/2017	7.66	7.53				
1/17/2017					5.53	
2/28/2017						5.99
3/1/2017		7.42				
3/2/2017	7.68					
3/8/2017					5.62	
4/26/2017	7.45	7.4				
5/2/2017					5.46	
5/9/2017						6.3
6/28/2017	7.65	7.5				
7/7/2017					5.81	
7/13/2017						5.57
9/22/2017						5.5
9/29/2017						5.58
10/4/2017	7.49	7.45				
10/5/2017					5.45	
10/6/2017						5.51
10/11/2017						5.47
10/12/2017				5.57		
11/21/2017				5.49		
1/11/2018				5.87		
2/20/2018				5.9		
3/28/2018	7.91	7.74				
3/30/2018					5.64	5.51
4/3/2018				5.66		
6/7/2018	7.69					
6/8/2018		7.64				
6/12/2018					5.64	
6/13/2018						5.5
6/29/2018				5.49		
8/6/2018				5.52		
9/24/2018				5.37		
9/26/2018					5.61	5.53
10/1/2018	7.39	7.47				
2/27/2019	7.55	7.54				
3/5/2019					5.72	
3/6/2019						5.21
4/1/2019	7.87	7.74				
4/4/2019					5.66	5.74

Time Series

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
9/25/2019	7.64	7.47				
9/26/2019					5.52	5.51
2/11/2020		7.09				
2/12/2020	7.83					
3/19/2020	7.65	7.31				
3/25/2020			5.65			5.49
3/26/2020					5.51	
9/23/2020	7.57	7.37			5.64	
9/24/2020			5.52			
9/25/2020				5.46		
10/7/2020						5.86
2/9/2021				5.42	5.69	
2/10/2021	7.81	7.58	5.53			6.31
3/3/2021	8.39	8.23			5.7	
3/4/2021			5.64	5.51		5.67

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.005	<0.005		
6/7/2016					0.001 (J)			<0.005	0.00048 (J)
7/27/2016					0.0012 (J)	<0.005	<0.005	<0.005	
7/28/2016									<0.005
9/16/2016					0.0015 (J)		<0.005		
9/19/2016						<0.005		<0.005	0.0014 (J)
11/2/2016								<0.005	
11/3/2016					0.0015 (J)	<0.005	<0.005		<0.005
1/11/2017					0.0014 (J)	<0.005	<0.005		
1/13/2017								<0.005	<0.005
3/1/2017						<0.005	<0.005		
3/2/2017					0.0017 (J)				
3/6/2017								<0.005	<0.005
4/26/2017						<0.005	<0.005	<0.005	<0.005
5/2/2017					<0.005				
6/28/2017						<0.005	<0.005		
6/29/2017					<0.005			<0.005	<0.005
3/28/2018					<0.005	<0.005	<0.005		
3/29/2018								<0.005	<0.005
6/5/2018									<0.005
6/6/2018								<0.005	
6/7/2018						<0.005			
6/11/2018					<0.005		<0.005		
9/25/2018					<0.005	<0.005	<0.005	<0.005	<0.005
10/16/2018	0.0019 (J)								
3/5/2019					<0.005		<0.005	<0.005	<0.005
3/6/2019						<0.005			
4/2/2019					<0.005				<0.005
4/3/2019						<0.005	<0.005	<0.005	
9/24/2019									<0.005
9/25/2019					<0.005			<0.005	
9/26/2019	<0.005					<0.005	<0.005		
1/15/2020		<0.005		0.045					
1/16/2020			0.0018 (J)						
2/11/2020					<0.005	<0.005	<0.005		
2/12/2020								<0.005	<0.005
3/24/2020					<0.005	<0.005	<0.005	<0.005	<0.005
3/25/2020	<0.005								
9/23/2020		<0.005	0.016		<0.005	<0.005	<0.005		
9/24/2020	<0.005			0.026				<0.005	<0.005
2/9/2021	<0.005	<0.005	<0.005	0.06		<0.005	<0.005	<0.005	<0.005
3/3/2021	<0.005	<0.005	<0.005		<0.005	<0.005	<0.005	<0.005	
3/4/2021				0.061					<0.005

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.005	<0.005	<0.005				
6/7/2016						0.037			
7/26/2016			0.0009 (J)	<0.005	0.0009 (J)				
7/28/2016						0.0385			
8/30/2016									0.0711
9/14/2016			<0.005	<0.005	<0.005				
9/20/2016						0.0464			
11/2/2016			<0.005	<0.005					
11/4/2016					<0.005				
11/8/2016						0.0521			
11/16/2016									0.0313
1/12/2017				<0.005	<0.005				
1/13/2017			<0.005						
1/16/2017						0.0469			
2/27/2017									0.0316
3/6/2017			<0.005						
3/7/2017				<0.005	<0.005				
3/9/2017						0.0437			
5/1/2017			<0.005	<0.005					
5/2/2017					<0.005	0.0395			
5/10/2017									0.053
6/27/2017				<0.005	<0.005				
6/29/2017			<0.005						
7/10/2017						0.0386			
7/11/2017									0.0697
10/11/2017	<0.005								
10/12/2017		<0.005					0.265	0.0191	0.0594
11/20/2017	<0.005	0.0042 (J)					0.246		
11/21/2017								0.0687	
1/10/2018		0.0043 (J)							
1/11/2018	<0.005							0.069	
1/12/2018							0.249		
2/19/2018		<0.005						0.071	
2/20/2018	<0.005						0.253		
3/29/2018			<0.005	<0.005	<0.005				
3/30/2018						0.028			
4/3/2018	<0.005	<0.005					0.23	0.067	
4/4/2018									0.055
6/6/2018				<0.005					
6/7/2018			<0.005		<0.005				
6/12/2018						0.026			
6/27/2018								0.066	
6/28/2018	<0.005	0.0032 (J)					0.23		
8/7/2018	<0.005	0.0031 (J)					0.2	0.061	
9/20/2018									0.041
9/24/2018	0.0015 (J)	0.0026 (J)					0.2	0.061	
9/26/2018			<0.005	<0.005	<0.005				
9/27/2018						0.023			
3/4/2019			<0.005	<0.005	<0.005				
3/6/2019						0.019			
4/3/2019			<0.005	<0.005	<0.005				
4/4/2019						0.017			

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	<0.005	0.0024 (J)							
8/22/2019							0.14	0.058	0.047
9/24/2019				<0.005	<0.005				
9/25/2019			<0.005						
9/27/2019						0.018			
10/9/2019	<0.005	0.0026 (J)					0.12	0.052	0.042
2/12/2020	<0.005	0.002 (J)	<0.005	<0.005	<0.005				
3/24/2020		0.002 (J)		<0.005	<0.005				
3/25/2020	<0.005		<0.005				0.099	0.057	0.046
3/26/2020						0.024			
9/22/2020			<0.005	<0.005	<0.005				
9/24/2020	<0.005	0.0016 (J)				0.031			0.046
9/25/2020							0.076	0.046	
2/8/2021				<0.005	<0.005				
2/9/2021			<0.005			0.032	0.073		
2/10/2021	<0.005	<0.005						0.033	0.043
3/2/2021				<0.005	<0.005				
3/3/2021			0.0019 (J)						
3/4/2021	<0.005	<0.005				0.037	0.076	0.037	0.048

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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					0.0011 (J)				<0.005
7/25/2016							<0.005		<0.005
7/26/2016					0.0016 (J)	<0.005			
8/30/2016			0.0017 (J)						
8/31/2016	<0.005			<0.005					
9/1/2016		0.0086 (J)							
9/13/2016						<0.005	<0.005		
9/14/2016								<0.005	
9/15/2016					0.0014 (J)				
9/19/2016									<0.005
11/1/2016						<0.005			<0.005
11/2/2016					<0.005				
11/4/2016							<0.005	<0.005	
11/14/2016			<0.005						
11/15/2016		0.0056 (J)							
11/16/2016	<0.005								
11/28/2016				<0.005					
12/15/2016								<0.005	
1/10/2017					0.0012 (J)				
1/11/2017						<0.005			
1/16/2017							<0.005	<0.005	<0.005
2/21/2017									<0.005
2/22/2017				<0.005					
2/24/2017	<0.005		0.0011 (J)						
2/27/2017		0.0098 (J)							
3/2/2017						<0.005	<0.005		
3/3/2017								<0.005	
3/8/2017					<0.005				
4/26/2017					<0.005				<0.005
4/27/2017						<0.005	<0.005		
4/28/2017								<0.005	
5/8/2017			<0.005	<0.005					

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		0.0076 (J)							
5/10/2017	<0.005								
5/26/2017								<0.005	
6/27/2017						<0.005	<0.005		
6/28/2017								<0.005	
6/30/2017					<0.005				<0.005
7/11/2017	<0.005		<0.005						
7/13/2017		0.0093 (J)							
7/17/2017				<0.005					
10/10/2017			<0.005						
10/11/2017		0.0089 (J)							
10/12/2017	<0.005								
10/16/2017				<0.005					
2/19/2018				<0.005					
3/27/2018					<0.005		<0.005		<0.005
3/28/2018								<0.005	
3/29/2018						<0.005			
4/2/2018			<0.005						
4/4/2018	<0.005	<0.005							
8/6/2018				<0.005					
9/19/2018			<0.005						
9/20/2018	<0.005	0.0081 (J)							
2/25/2019				<0.005					
2/26/2019					<0.005				<0.005
2/27/2019						<0.005	<0.005	<0.005	
3/28/2019						<0.005	<0.005		
3/29/2019					0.0019 (J)			<0.005	
4/1/2019									<0.005
6/12/2019				<0.005					
8/19/2019				<0.005					
8/20/2019			<0.005						
8/21/2019	<0.005								
9/24/2019						<0.005	<0.005	<0.005	
9/25/2019					<0.005				<0.005
9/26/2019		0.0077 (J)							
10/8/2019				<0.005					
10/9/2019	<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	<0.005
3/25/2020	<0.005	0.0085 (J)							
8/26/2020				<0.005					
8/27/2020			<0.005						
9/22/2020				<0.005					
9/23/2020						<0.005	<0.005	<0.005	
9/24/2020		0.0091 (J)							<0.005
9/25/2020	<0.005				<0.005				
2/9/2021	<0.005	0.0079 (J)							
2/10/2021					<0.005			<0.005	

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Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
2/11/2021									<0.005
2/12/2021						<0.005	<0.005		
3/1/2021									<0.005
3/2/2021				<0.005	<0.005				
3/3/2021						<0.005	<0.005	<0.005	
3/4/2021	<0.005	0.0058							

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Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.005				
6/2/2016	<0.005					
6/8/2016					<0.005	
7/25/2016		<0.005				
7/26/2016	<0.005					
8/1/2016					<0.005	
9/2/2016						0.0012 (J)
9/14/2016		<0.005				
9/15/2016	<0.005					
9/20/2016					<0.005	
11/1/2016	<0.005	<0.005				
11/8/2016					<0.005	
11/14/2016						<0.005
1/11/2017	<0.005	<0.005				
1/17/2017					<0.005	
2/28/2017						0.0017 (J)
3/1/2017		<0.005				
3/2/2017	<0.005					
3/8/2017					<0.005	
4/26/2017	<0.005	<0.005				
5/2/2017					<0.005	
5/9/2017						0.0018 (J)
6/28/2017	<0.005	<0.005				
7/7/2017					<0.005	
7/13/2017						0.0031 (J)
9/22/2017						0.0024 (J)
9/29/2017						0.002 (J)
10/6/2017						<0.005
10/12/2017				0.234		
11/21/2017				0.225		
1/11/2018				0.168		
2/20/2018				0.315		
3/28/2018	<0.005	<0.005				
3/30/2018					<0.005	<0.005
4/3/2018				0.28		
6/12/2018					<0.005	
6/13/2018						0.0024 (J)
6/29/2018				0.26		
8/6/2018				0.21		
9/24/2018				0.33		
9/26/2018					<0.005	0.0037 (J)
10/16/2018			<0.005			
2/27/2019	<0.005	<0.005				
3/5/2019					<0.005	
3/6/2019						0.0033 (J)
4/1/2019	<0.005	<0.005				
4/4/2019					<0.005	0.0029 (J)
9/25/2019	<0.005	<0.005				
9/26/2019			<0.005		<0.005	0.0019 (J)
2/11/2020		<0.005				
2/12/2020	<0.005					
3/19/2020	<0.005	<0.005				

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/25/2020			<0.005			0.0024 (J)
3/26/2020					<0.005	
9/23/2020	<0.005	<0.005			<0.005	
9/24/2020			<0.005			
9/25/2020				0.32		
10/7/2020						<0.005
2/9/2021				0.28	<0.005	
2/10/2021	<0.005	<0.005	<0.005			<0.005
3/3/2021	<0.005	<0.005			<0.005	
3/4/2021			<0.005	0.27		<0.005

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Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						1.2	1.8		
6/7/2016					4.4			<1	5.2
7/27/2016					4.7	1.7	1.9	0.08 (J)	
7/28/2016									5.1
9/16/2016					4.8		1.7		
9/19/2016						1.8		0.08 (J)	4.8
11/2/2016								0.1 (J)	
11/3/2016					5.3	0.69 (J)	1.9		5
1/11/2017					5.2	<1	1.7		
1/13/2017								<1	4.3
3/1/2017						1.8	<1		
3/2/2017					5				
3/6/2017								<1	4.5
4/26/2017						1.6	1.9	<1	4.9
5/2/2017					5				
6/28/2017						<1	<1		
6/29/2017					5.2			<1	5.5
10/3/2017									5.8
10/4/2017					5.3		1.7	<1	
10/5/2017						1.6			
6/5/2018									6.1
6/6/2018								0.049 (J)	
6/7/2018						0.68 (J)			
6/11/2018					5.2		0.95 (J)		
9/25/2018					6.1	1	1.5	0.13 (J)	7
10/16/2018	83.7								
4/2/2019					5.1				3.8
4/3/2019						0.82 (J)	1.3	0.12 (J)	
9/24/2019									1
9/25/2019					5.5			<1	
9/26/2019	46.6					0.64 (J)	1		
3/24/2020					5.4	<1	0.99 (J)	<1	3
3/25/2020	11.7								
9/23/2020		9.1	152		5.1	0.53 (J)	1.1		
9/24/2020	13.1			438				<1	3.6
3/3/2021	16.9	7.9	91.7		5.2	<1	1	<1	
3/4/2021				340					4.5

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			8	20	1.9				
6/7/2016						56			
7/26/2016			7.7	20	1.8				
7/28/2016						57			
8/30/2016									980
9/14/2016			7.5	19	1.8				
9/20/2016						68			
11/2/2016			8.2	20					
11/4/2016					2				
11/8/2016						79			
11/16/2016									940
1/12/2017				19	1.9				
1/13/2017			8.1						
1/16/2017						72			
2/27/2017									940
3/6/2017			8						
3/7/2017				20	2.1				
3/9/2017						69			
5/1/2017			8.4	20					
5/2/2017					2	60			
5/10/2017									1200
6/27/2017				18	2.1				
6/29/2017			9.2						
7/10/2017						57			
7/11/2017									1300
10/3/2017				16	2.3				
10/5/2017			9.6						
10/11/2017	20					52			
10/12/2017		17					940	400	1100
11/20/2017	24	71					980		
11/21/2017								430	
1/10/2018		66							
1/11/2018	23							390	
1/12/2018							880		
2/19/2018		57.2						414	
2/20/2018	20.6						905		
4/3/2018	24.5	49.4					872	406	
4/4/2018									1020
6/6/2018				8.3					
6/7/2018			8.5		2				
6/12/2018						41.4			
6/27/2018								357	
6/28/2018	22	43.8					869		
8/7/2018	20.7	40.5					879	346	
9/20/2018									810
9/24/2018	21.2	39.7					872	358	
9/26/2018			10.2	7.9	2.3				
9/27/2018						39.6			
3/26/2019		34.3							
3/27/2019	17.7						851		831
3/28/2019								258	
4/3/2019			8.5	7	2.1				

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Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						27.9			
9/24/2019				5.5	2.4				
9/25/2019			8.5						
9/27/2019						30.3			
10/9/2019	15	27.9					708	263	725
3/24/2020		25.2		5.9	2.1				
3/25/2020	14.3		8.8				483	214	642
3/26/2020						36.5			
9/22/2020			8.2	5.5	2.1				
9/24/2020	11.7	22.9				52.5			579
9/25/2020							414	175	
3/2/2021				2.6	2.3				
3/3/2021			7.8						
3/4/2021	12	21.5				61.7 (M1)	356	117	537

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Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						5	4.2		
6/2/2016					6.6				1.3
7/25/2016							3.7		1.2
7/26/2016					6.1	5.4			
8/30/2016			160						
8/31/2016	34			29					
9/1/2016		95							
9/13/2016						2.9	5.2		
9/14/2016								9.4	
9/15/2016					6.1				
9/19/2016									1.2
11/1/2016						3.9			1.3
11/2/2016					6.3				
11/4/2016							5	13	
11/14/2016			150						
11/15/2016		94							
11/16/2016	240								
11/28/2016				36					
12/15/2016								1.8	
1/10/2017					5.9				
1/11/2017						3.7			
1/16/2017							7.9	11	<1
2/21/2017									1.4
2/22/2017				43					
2/24/2017	89		120						
2/27/2017		84							
3/2/2017						4.6	7.4		
3/3/2017								8.8	
3/8/2017					7				
4/26/2017					7				1.4
4/27/2017						5.2	7.4		
4/28/2017								10	
5/8/2017			120	60					
5/9/2017		91							
5/10/2017	100								
5/26/2017								12	
6/27/2017						5.9	6.4		
6/28/2017								11	
6/30/2017					6.5				<1
7/11/2017	110		110						
7/13/2017		88							
7/17/2017				63					
10/3/2017						6.6	5.9	7.9	
10/4/2017									1.4
10/5/2017					7.9				
10/10/2017			93						
10/11/2017		86							
10/12/2017	120								
10/16/2017				62					
2/19/2018				64.6					
4/2/2018			88.8						
4/4/2018	160	76.5							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						6.4			
6/6/2018							4.4		
6/7/2018								8.8	
6/8/2018					6.4				
6/11/2018									1.1
8/6/2018				42.1					
9/19/2018			75						
9/20/2018	247	84.1							
10/1/2018					6.8	5.6	4	9.1	
10/2/2018									1
2/25/2019				42.1					
3/27/2019			65.9						
3/28/2019	181	82.8				8	4.3		
3/29/2019					7.3			9	
4/1/2019									0.96 (J)
6/12/2019				83.4					
9/24/2019						5.3	4.3	9.1	
9/25/2019					6.6				0.81 (J)
9/26/2019		80							
10/8/2019			52.3	128					
10/9/2019	279								
3/17/2020			71.6	98.6					
3/18/2020					8.1		5.3		
3/19/2020						10		12.4	1.6
3/25/2020	164	76.1							
9/22/2020			51.5	145					
9/23/2020						8.1	3.4	11.8	
9/24/2020		77							0.69 (J)
9/25/2020	281				6.1				
3/1/2021			51.6						0.88 (J)
3/2/2021				156	6				
3/3/2021						9	4.4	10.6	
3/4/2021	328	75.1							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		12				
6/2/2016	5.8					
6/8/2016					<1	
7/25/2016		8.4				
7/26/2016	6.7					
8/1/2016					1.1	
9/2/2016						72
9/14/2016		8.6				
9/15/2016	6					
9/20/2016					0.38 (J)	
11/1/2016	4.9	8.9				
11/8/2016					0.39 (J)	
11/14/2016						110
1/11/2017	4.5	8.6				
1/17/2017					<1	
2/28/2017						110
3/1/2017		9.3				
3/2/2017	4.4					
3/8/2017					0.29 (J)	
4/26/2017	5.1	11				
5/2/2017					0.29 (J)	
5/9/2017						130
6/28/2017	5.4	12				
7/7/2017					0.37 (J)	
7/13/2017						140
9/22/2017						160
9/29/2017						160
10/4/2017	6.2	12				
10/5/2017					<1	
10/6/2017						160
10/11/2017						150
10/12/2017				650		
11/21/2017				700		
1/11/2018				590		
2/20/2018				677		
4/3/2018				615		
6/7/2018	6.7					
6/8/2018		9.6				
6/12/2018					0.35 (J)	
6/13/2018						144
6/29/2018				634		
8/6/2018				623		
9/24/2018				674		
9/26/2018					0.28 (J)	160
10/1/2018	7.1	9.1				
10/16/2018			34.2			
4/1/2019	7.2	8.5				
4/4/2019					0.29 (J)	119
9/25/2019	7	13.8				
9/26/2019			14.3		0.23 (J)	84.8
3/19/2020	9	12.9				
3/25/2020			36.1			58.8

Time Series

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/26/2020					<1	
9/23/2020	6.9	16.8			<1	
9/24/2020			7.2			
9/25/2020				563		
10/7/2020						18.2
3/3/2021	7	9.6			<1	
3/4/2021			8.8	485		6.3

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.001	<0.001		
6/7/2016					<0.001			<0.001	<0.001
7/27/2016					<0.001	<0.001	<0.001	<0.001	
7/28/2016									<0.001
9/16/2016					<0.001		<0.001		
9/19/2016						<0.001		<0.001	<0.001
11/2/2016								<0.001	
11/3/2016					<0.001	<0.001	<0.001		<0.001
1/11/2017					<0.001	<0.001	<0.001		
1/13/2017								<0.001	<0.001
3/1/2017						<0.001	<0.001		
3/2/2017					<0.001				
3/6/2017								<0.001	<0.001
4/26/2017						<0.001	<0.001	<0.001	<0.001
5/2/2017					<0.001				
6/28/2017						<0.001	<0.001		
6/29/2017					<0.001			<0.001	<0.001
3/28/2018					<0.001	<0.001	<0.001		
3/29/2018								<0.001	<0.001
9/25/2018									<0.001
3/5/2019					<0.001		<0.001	<0.001	<0.001
3/6/2019						<0.001			
4/2/2019					<0.001				<0.001
4/3/2019						<0.001	<0.001	<0.001	
9/24/2019									<0.001
9/25/2019					<0.001			<0.001	
9/26/2019	<0.001					<0.001	<0.001		
2/11/2020					<0.001	<0.001	<0.001		
2/12/2020								<0.001	<0.001
3/24/2020					<0.001	<0.001	<0.001	<0.001	<0.001
3/25/2020	<0.001								
9/23/2020		<0.001	<0.001		<0.001	<0.001	<0.001		
9/24/2020	<0.001			<0.001				<0.001	<0.001
2/9/2021	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.001	<0.001	<0.001				
6/7/2016						<0.001			
7/26/2016			<0.001	<0.001	<0.001				
7/28/2016						<0.001			
8/30/2016									<0.001
9/14/2016			<0.001	<0.001	<0.001				
9/20/2016						<0.001			
11/2/2016			<0.001	<0.001					
11/4/2016					<0.001				
11/8/2016						<0.001			
11/16/2016									<0.001
1/12/2017				<0.001	<0.001				
1/13/2017			<0.001						
1/16/2017						<0.001			
2/27/2017									<0.001
3/6/2017			<0.001						
3/7/2017				<0.001	<0.001				
3/9/2017						<0.001			
5/1/2017			<0.001	<0.001					
5/2/2017					<0.001	<0.001			
5/10/2017									<0.001
6/27/2017				<0.001	<0.001				
6/29/2017			<0.001						
7/10/2017						<0.001			
7/11/2017									<0.001
10/11/2017	<0.001								
10/12/2017		<0.001					<0.001	<0.001	<0.001
11/20/2017	<0.001	<0.001					<0.001		
11/21/2017								<0.001	
1/10/2018		<0.001							
1/11/2018	<0.001							<0.001	
1/12/2018							<0.001		
2/19/2018		<0.001						<0.001	
2/20/2018	<0.001						<0.001		
3/29/2018			<0.001	<0.001	<0.001				
3/30/2018						<0.001			
4/3/2018	<0.001	<0.001					<0.001	<0.001	
4/4/2018									<0.001
6/27/2018								<0.001	
6/28/2018	<0.001	<0.001					<0.001		
8/7/2018	<0.001	<0.001					<0.001	<0.001	
9/20/2018									<0.001
9/24/2018	<0.001	<0.001					<0.001	<0.001	
3/4/2019			<0.001	<0.001	<0.001				
3/6/2019						<0.001			
4/3/2019			<0.001	<0.001	<0.001				
4/4/2019						<0.001			
8/21/2019	<0.001	<0.001							
8/22/2019							<0.001	<0.001	<0.001
9/24/2019				<0.001	<0.001				
9/25/2019			<0.001						
9/27/2019						<0.001			

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001				
3/24/2020		<0.001		<0.001	<0.001				
3/25/2020	<0.001		<0.001				<0.001	<0.001	<0.001
3/26/2020						<0.001			
9/22/2020			<0.001	<0.001	<0.001				
9/24/2020	<0.001	<0.001				<0.001			<0.001
9/25/2020							<0.001	<0.001	
2/8/2021				<0.001	<0.001				
2/9/2021			<0.001			<0.001	<0.001		
2/10/2021	<0.001	<0.001						<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.001
7/26/2016					<0.001	<0.001			
8/30/2016			<0.001						
8/31/2016	<0.001			<0.001					
9/1/2016		<0.001							
9/13/2016						<0.001	<0.001		
9/14/2016								<0.001	
9/15/2016					<0.001				
9/19/2016									<0.001
11/1/2016						<0.001			<0.001
11/2/2016					<0.001				
11/4/2016							<0.001	<0.001	
11/14/2016			<0.001						
11/15/2016		<0.001							
11/16/2016	<0.001								
11/28/2016				<0.001					
12/15/2016								<0.001	
1/10/2017					<0.001				
1/11/2017						<0.001			
1/16/2017							<0.001	<0.001	<0.001
2/21/2017									<0.001
2/22/2017				<0.001					
2/24/2017	<0.001		<0.001						
2/27/2017		9E-05 (J)							
3/2/2017						<0.001	<0.001		
3/3/2017								<0.001	
3/8/2017					<0.001				
4/26/2017					<0.001				<0.001
4/27/2017						<0.001	<0.001		
4/28/2017								<0.001	
5/8/2017			<0.001	6E-05 (J)					
5/9/2017		<0.001							

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/10/2017	<0.001								
5/26/2017								<0.001	
6/27/2017						<0.001	<0.001		
6/28/2017								<0.001	
6/30/2017					<0.001				<0.001
7/11/2017	<0.001		<0.001						
7/13/2017		<0.001							
7/17/2017				6E-05 (J)					
10/10/2017			<0.001						
10/11/2017		<0.001							
10/12/2017	<0.001								
10/16/2017				7E-05 (J)					
2/19/2018				<0.001					
3/27/2018					<0.001		<0.001		<0.001
3/28/2018								<0.001	
3/29/2018						<0.001			
4/2/2018			<0.001						
4/4/2018	<0.001	<0.001							
8/6/2018				<0.001					
9/19/2018			<0.001						
9/20/2018	<0.001	<0.001							
2/25/2019				<0.001					
2/26/2019					<0.001				<0.001
2/27/2019						<0.001	<0.001	<0.001	
6/12/2019				<0.001					
8/19/2019				5.5E-05 (J)					
8/20/2019			5.8E-05 (J)						
8/21/2019	<0.001								
9/26/2019		<0.001							
10/8/2019			8.4E-05 (J)	<0.001					
2/10/2020						<0.001	5.5E-05 (J)		
2/11/2020								<0.001	
2/12/2020					8.9E-05 (J)				<0.001
3/17/2020			<0.001	<0.001					
3/18/2020					<0.001		<0.001		
3/19/2020						<0.001		<0.001	<0.001
3/25/2020	<0.001	<0.001							
8/26/2020				<0.001					
8/27/2020			<0.001						
9/22/2020				<0.001					
9/23/2020						<0.001	<0.001	<0.001	
9/24/2020		<0.001							<0.001
9/25/2020	<0.001				<0.001				
2/9/2021	<0.001	<0.001							
2/10/2021					<0.001			<0.001	
2/11/2021									<0.001
2/12/2021						<0.001	<0.001		
3/2/2021				<0.001					

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.001				
6/2/2016	<0.001					
6/8/2016					<0.001	
7/25/2016		<0.001				
7/26/2016	0.0001 (J)					
8/1/2016					<0.001	
9/2/2016						<0.001
9/14/2016		<0.001				
9/15/2016	<0.001					
9/20/2016					<0.001	
11/1/2016	<0.001	<0.001				
11/8/2016					<0.001	
11/14/2016						<0.001
1/11/2017	<0.001	<0.001				
1/17/2017					<0.001	
2/28/2017						<0.001
3/1/2017		<0.001				
3/2/2017	<0.001					
3/8/2017					<0.001	
4/26/2017	<0.001	<0.001				
5/2/2017					<0.001	
5/9/2017						<0.001
6/28/2017	<0.001	<0.001				
7/7/2017					<0.001	
7/13/2017						<0.001
9/22/2017						<0.001
9/29/2017						<0.001
10/6/2017						<0.001
10/12/2017				<0.001		
11/21/2017				<0.001		
1/11/2018				<0.001		
2/20/2018				<0.001		
3/28/2018	<0.001	<0.001				
3/30/2018					<0.001	<0.001
4/3/2018				<0.001		
6/29/2018				<0.001		
8/6/2018				<0.001		
9/24/2018				<0.001		
2/27/2019	<0.001	<0.001				
3/5/2019					<0.001	
3/6/2019						<0.001
4/4/2019					<0.001	<0.001
9/26/2019			<0.001		<0.001	<0.001
2/11/2020		<0.001				
2/12/2020	<0.001					
3/19/2020	<0.001	<0.001				
3/25/2020			<0.001			<0.001
3/26/2020					<0.001	
9/23/2020	<0.001	0.00016 (J)			<0.001	
9/24/2020			<0.001			
9/25/2020				<0.001		
10/7/2020						<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/9/2021				<0.001	<0.001	
2/10/2021	<0.001	<0.001	<0.001			<0.001

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						120	58		
6/7/2016					28			38	60
7/27/2016					74	94	35	74	
7/28/2016									81
9/16/2016					67		35		
9/19/2016						92		45	68
11/2/2016								53	
11/3/2016					41	104	48		61
1/11/2017					104	133	95		
1/13/2017								46	76
3/1/2017						119	79		
3/2/2017					77				
3/6/2017								164	167
4/26/2017						162	36	34	50
5/2/2017					142				
6/28/2017						98	45		
6/29/2017					53			68	94
10/3/2017									149
10/4/2017					61		45	54	
10/5/2017						104			
6/5/2018									109
6/6/2018								79	
6/7/2018						68			
6/11/2018					70		74		
9/25/2018					86	109	63	73	122
10/16/2018	209								
4/2/2019					72				134
4/3/2019						89	63	57	
9/24/2019									157
9/25/2019					81			75	
9/26/2019						126	72		
3/24/2020					71	91	59	76	117
3/25/2020	139								
9/23/2020		62	329		99	103	81		
9/24/2020	106			788				69	113
3/3/2021	121	40	245		57	95	37	53	
3/4/2021				604					110

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			96	160	66				
6/7/2016						130			
7/26/2016			92	177	78				
7/28/2016						119			
8/30/2016									1650
9/14/2016			102	187	73				
9/20/2016						132			
11/2/2016			115	181					
11/4/2016					75				
11/8/2016						146			
11/16/2016									1420
1/12/2017				202	86				
1/13/2017			67						
1/16/2017						194			
2/27/2017									1640
3/6/2017			159						
3/7/2017				257	108				
3/9/2017						288			
5/1/2017			107	165					
5/2/2017					103	221			
5/10/2017									1630
6/27/2017				189	73				
6/29/2017			79						
7/10/2017						123			
7/11/2017									1800
10/3/2017				170	89				
10/5/2017			95						
10/11/2017	68					100			
10/12/2017		74					1360	636	1600
11/20/2017	139	179					1390		
11/21/2017								706	
1/10/2018		140							
1/11/2018	153							701	
1/12/2018							1400		
2/19/2018		119						630	
2/20/2018	87						1300		
4/3/2018	85	106					1390	660	
4/4/2018									1520
6/6/2018				151					
6/7/2018			90		142				
6/12/2018						115			
6/27/2018								575	
6/28/2018	88	112					1310		
8/7/2018	89	103					1340	574	
9/20/2018									1240
9/24/2018	82	107					1400	588	
9/26/2018			116	144	86				
9/27/2018						105			
3/26/2019		90							
3/27/2019	75						1190		1100
3/28/2019								372	
4/3/2019			111	142	83				

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						85			
9/24/2019				129	79				
9/25/2019			117						
9/27/2019						96			
10/9/2019	119	98					1100	440	1170
3/24/2020		84		139	68				
3/25/2020	158		146				883	428	1200
3/26/2020						110			
9/22/2020			83	104	75				
9/24/2020	170	77				129			1060
9/25/2020							664	307	
3/2/2021				52	67				
3/3/2021			80						
3/4/2021	168	57				96	600	224	501

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						120	54		
6/2/2016					46				36
7/25/2016							48		50
7/26/2016					54	94			
8/30/2016			319						
8/31/2016	80			209					
9/1/2016		228							
9/13/2016						105	67		
9/14/2016								152	
9/15/2016					54				
9/19/2016									35
11/1/2016						44			<25
11/2/2016					71				
11/4/2016							60	148	
11/14/2016			280						
11/15/2016		211							
11/16/2016	112								
11/28/2016				102					
12/15/2016								191	
1/10/2017					45				
1/11/2017						107			
1/16/2017							65	180	47
2/21/2017									<25
2/22/2017				164					
2/24/2017	147		162						
2/27/2017		382							
3/2/2017						98	61		
3/3/2017								156	
3/8/2017					178				
4/26/2017					52				55
4/27/2017						116	31		
4/28/2017								130	
5/8/2017			194	145					
5/9/2017		154							
5/10/2017	203								
5/26/2017								223	
6/27/2017						89	42		
6/28/2017								166	
6/30/2017					45				42
7/11/2017	238		193						
7/13/2017		192							
7/17/2017				185					
10/3/2017						119	58	153	
10/4/2017									31
10/5/2017					40				
10/10/2017			175						
10/11/2017		177							
10/12/2017	287								
10/16/2017				218					
2/19/2018				173					
4/2/2018			192						
4/4/2018	292	174							

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						127			
6/6/2018							96		
6/7/2018								146	
6/8/2018					114				
6/11/2018									59
8/6/2018				158					
9/19/2018			186						
9/20/2018	434	186							
10/1/2018					50	117	60	155	
10/2/2018									57
2/25/2019				92					
3/27/2019			170						
3/28/2019	323	164				87	87		
3/29/2019					63			150	
4/1/2019									54
6/12/2019				226					
9/24/2019						124	54	146	
9/25/2019					64				51
9/26/2019		192							
10/8/2019			172	276					
10/9/2019	501								
3/17/2020			165	185					
3/18/2020					57		35		
3/19/2020						116		148	47
3/25/2020	352	130							
9/22/2020			141	281					
9/23/2020						108	15	161	
9/24/2020		187							51
9/25/2020	494				54				
3/1/2021			145						23
3/2/2021				296	67				
3/3/2021						99	39	138	
3/4/2021	592	145							

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		150				
6/2/2016	130					
6/8/2016					66	
7/25/2016		135				
7/26/2016	141					
8/1/2016					56	
9/2/2016						243
9/14/2016		127				
9/15/2016	153					
9/20/2016					53	
11/1/2016	92	75				
11/8/2016					58	
11/14/2016						272
1/11/2017	159	148				
1/17/2017					56	
2/28/2017						306
3/1/2017		182				
3/2/2017	117					
3/8/2017					192	
4/26/2017	181	92				
5/2/2017					113	
5/9/2017						303
6/28/2017	169	126				
7/7/2017					46	
7/13/2017						282
9/22/2017						309
9/29/2017						273
10/4/2017	141	147				
10/5/2017					48	
10/6/2017						287
10/11/2017						264
10/12/2017				1060		
11/21/2017				1100		
1/11/2018				1020		
2/20/2018				1050		
4/3/2018				1080		
6/7/2018	95					
6/8/2018		158				
6/12/2018					79	
6/13/2018						292
6/29/2018				979		
8/6/2018				1020		
9/24/2018				1090		
9/26/2018					59	277
10/1/2018	165	138				
10/16/2018			123			
4/1/2019	149	19 (J)				
4/4/2019					63	240
9/25/2019	157	159				
9/26/2019					81	198
3/19/2020	146	148				
3/25/2020			84			164

Time Series

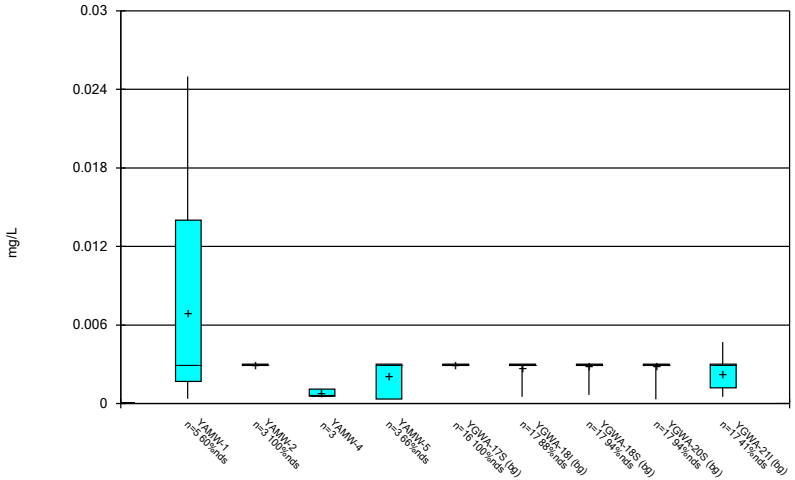
Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:36 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
3/26/2020					67	
9/23/2020	157	155			87	
9/24/2020			100			
9/25/2020				878		
10/7/2020						137
3/3/2021	137	111			70	
3/4/2021			59	856		69

FIGURE B.

Box & Whiskers Plot

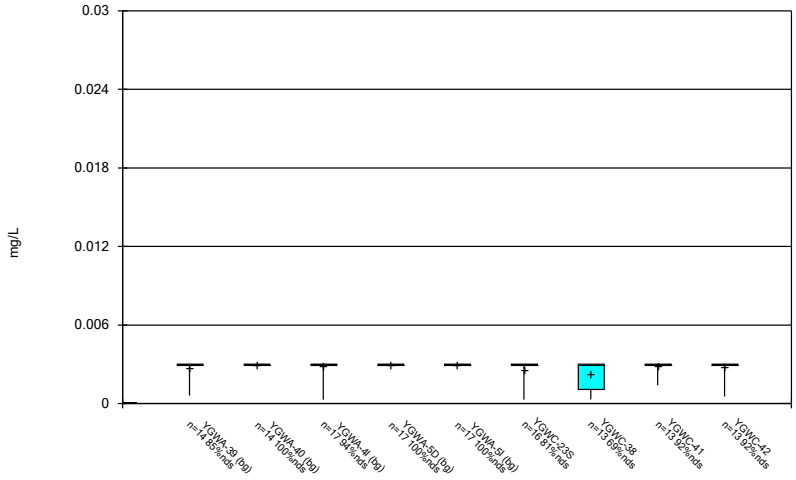


Constituent: Antimony Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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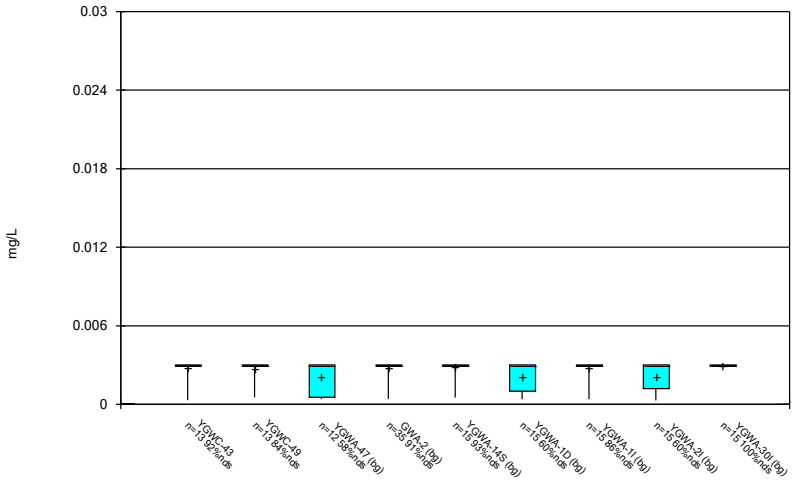
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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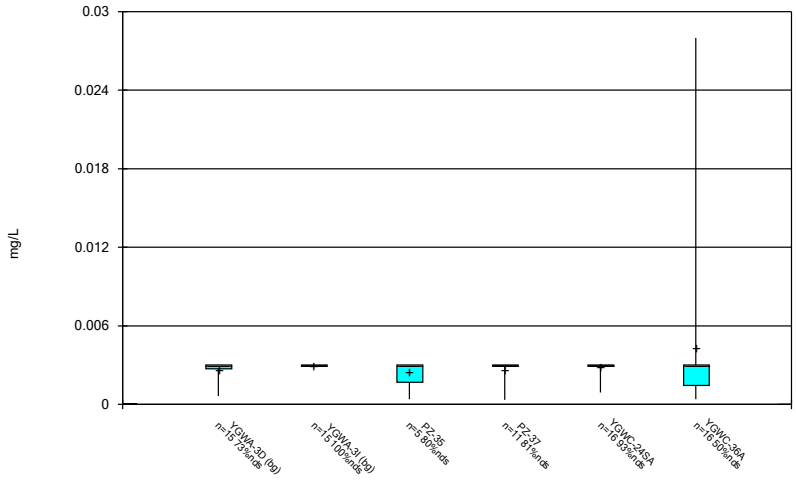
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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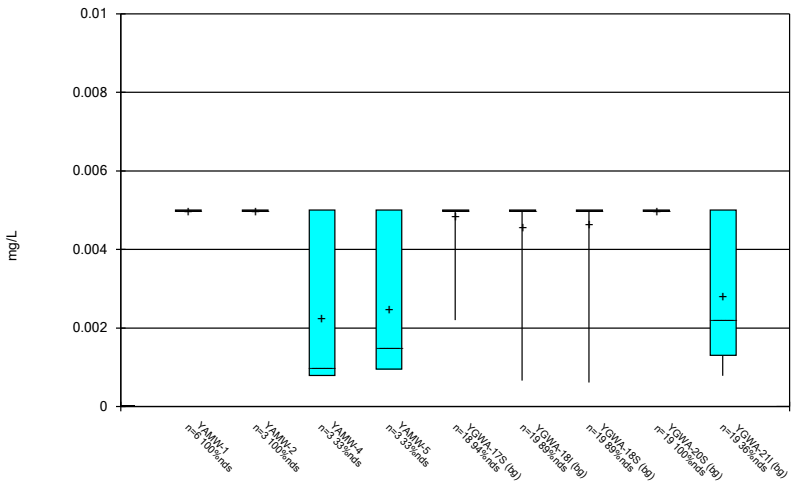
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

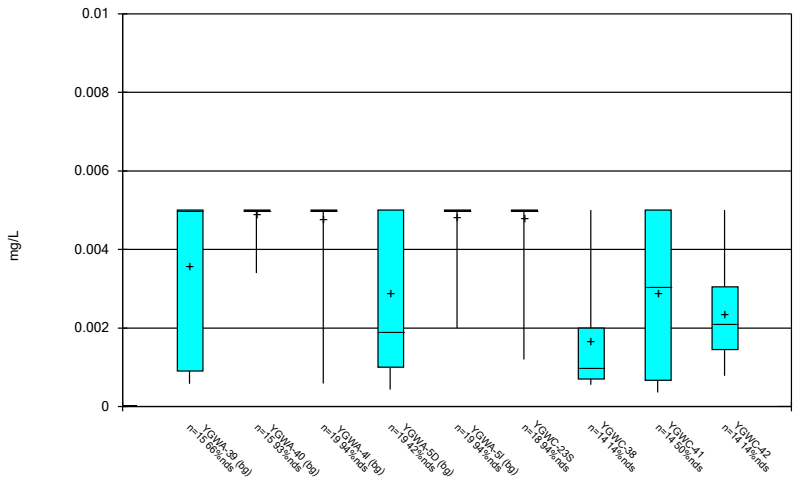


Constituent: Arsenic Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

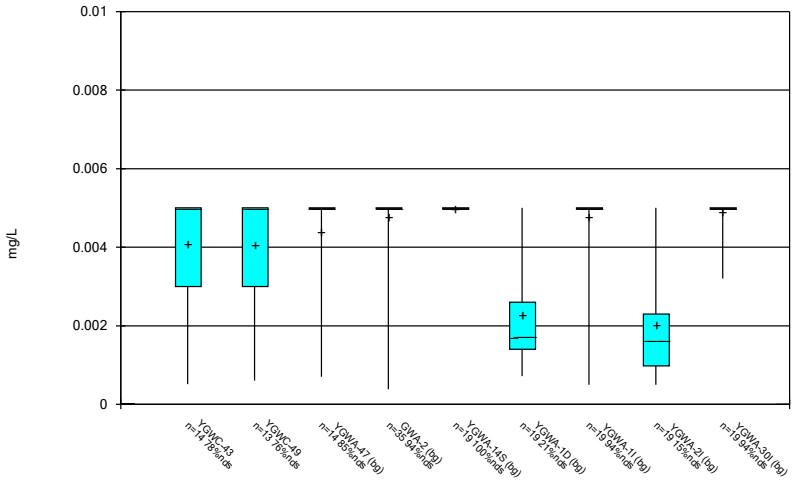


Constituent: Arsenic Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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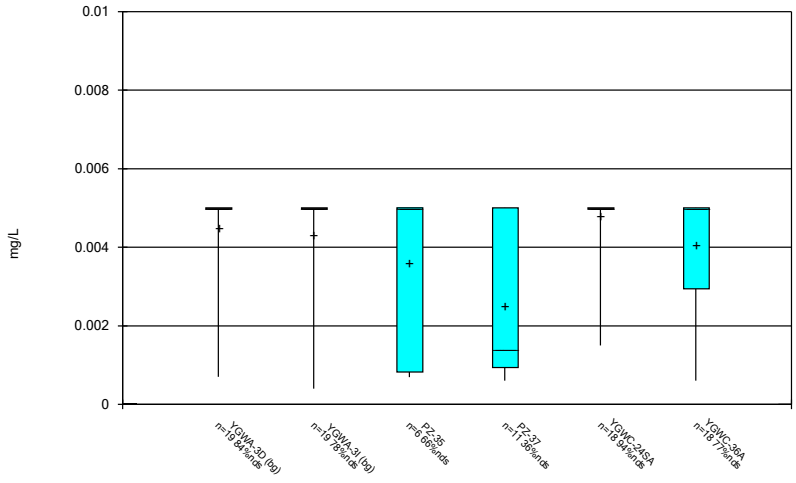
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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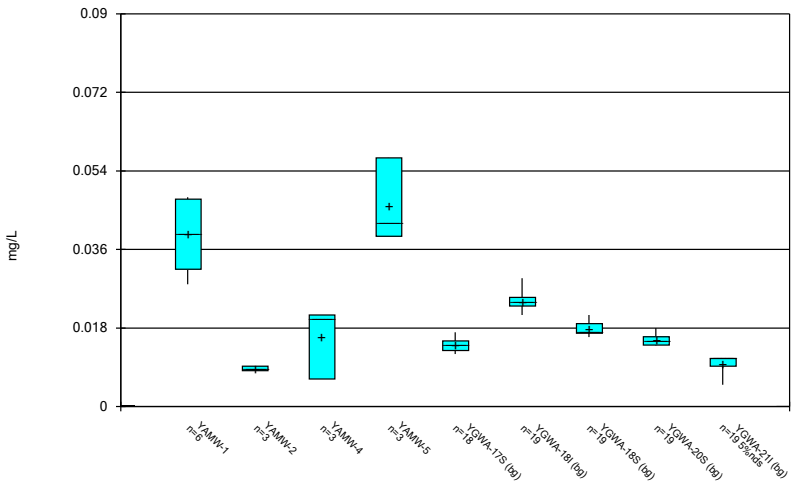
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

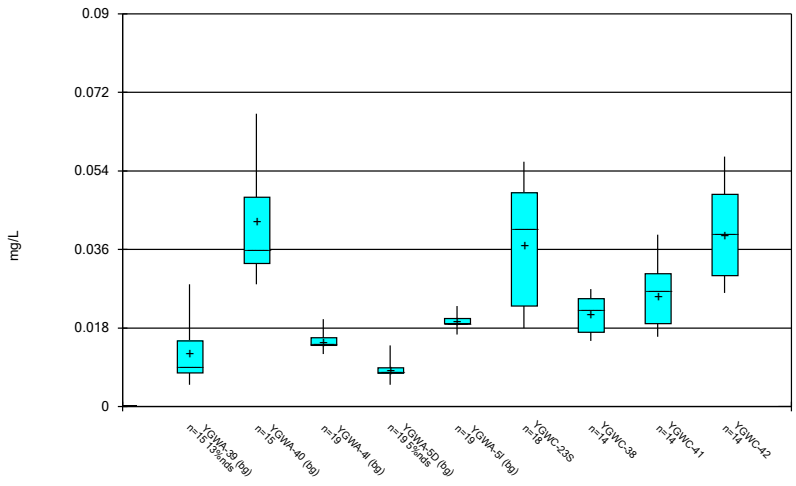


Constituent: Barium Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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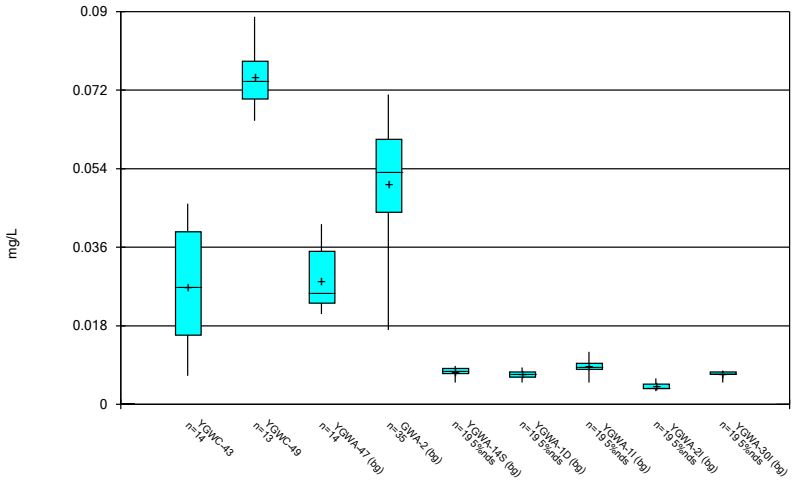
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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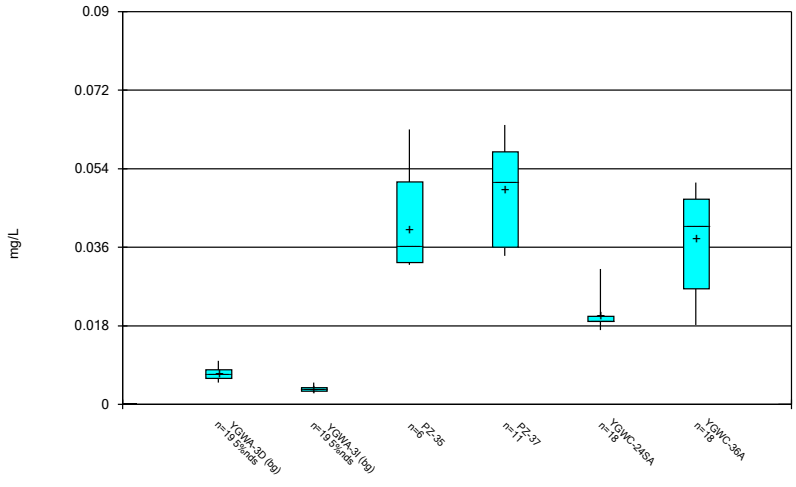
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

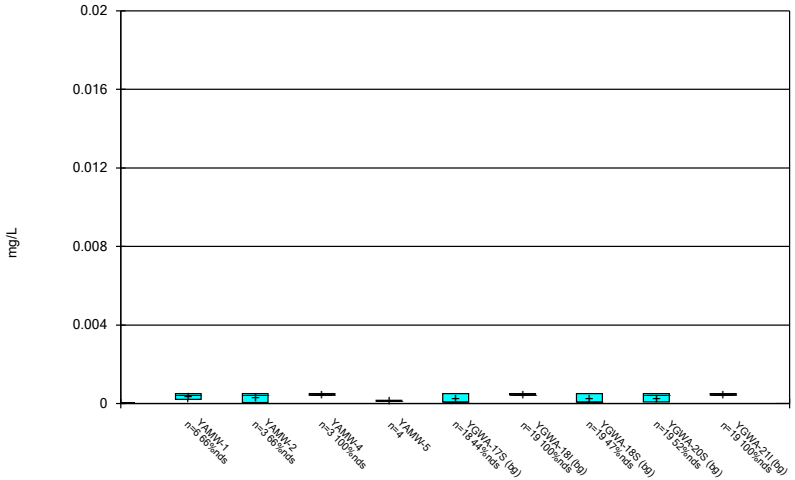
Box & Whiskers Plot



Constituent: Barium Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

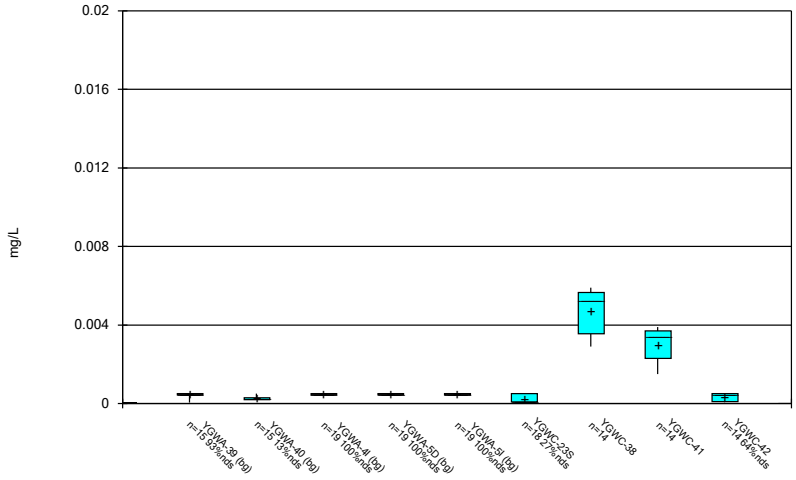
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/6/2021 8:37 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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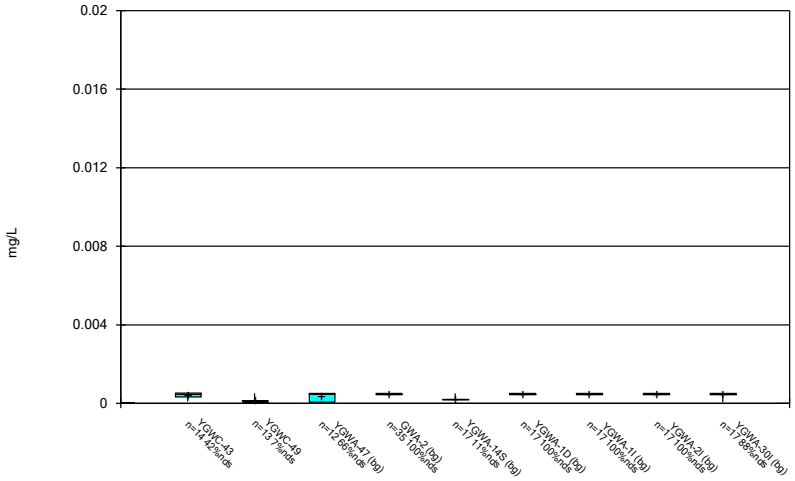
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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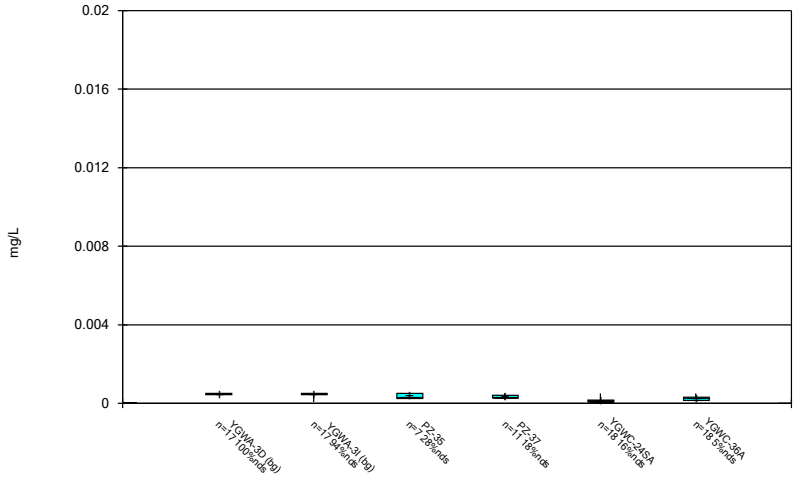
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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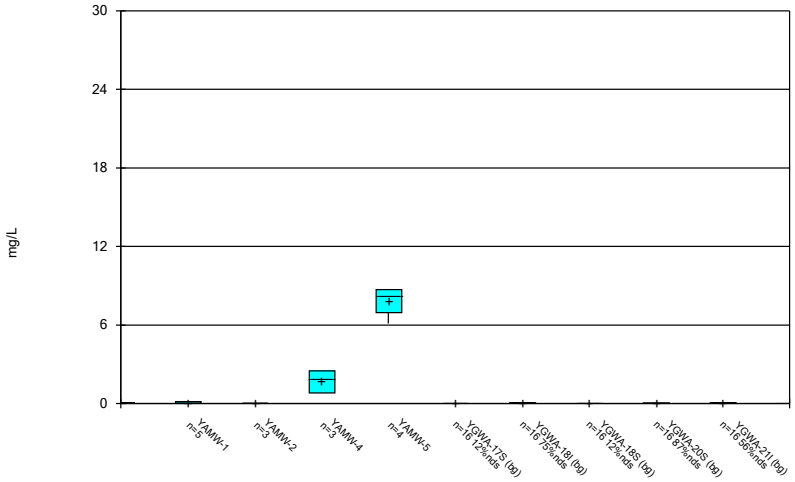
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

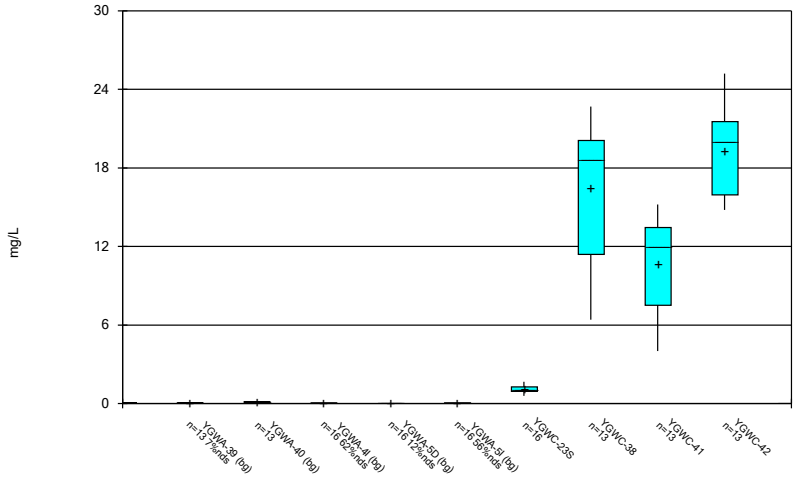


Constituent: Boron Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

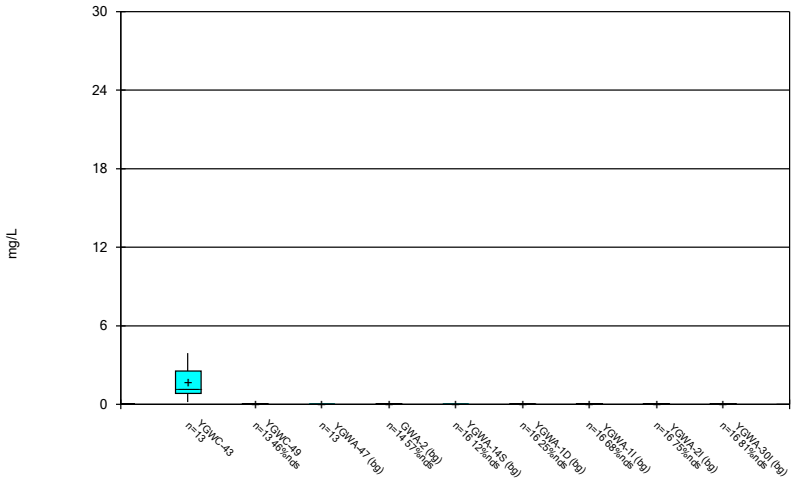


Constituent: Boron Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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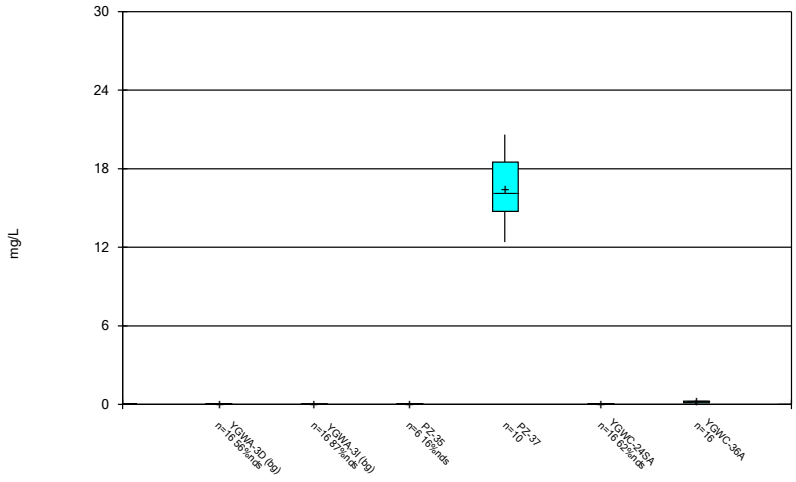
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

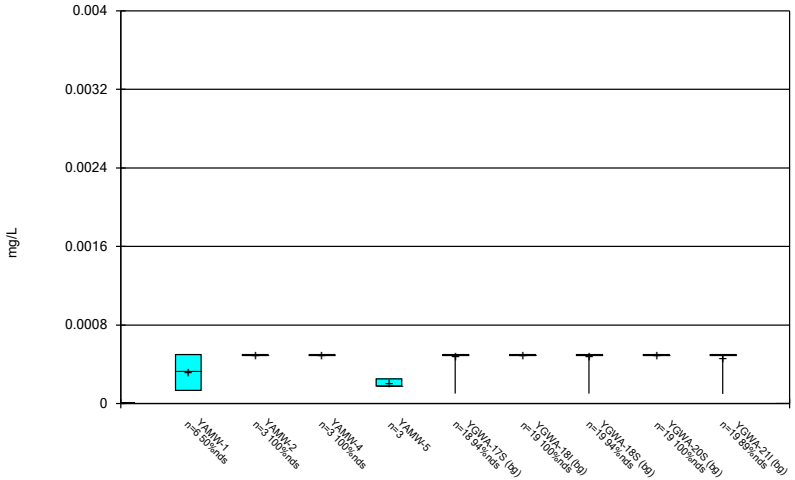
Box & Whiskers Plot



Constituent: Boron Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

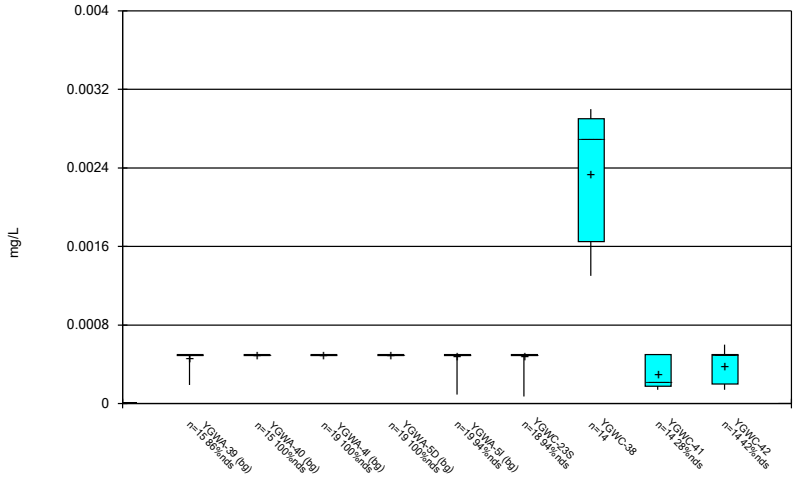


Constituent: Cadmium Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

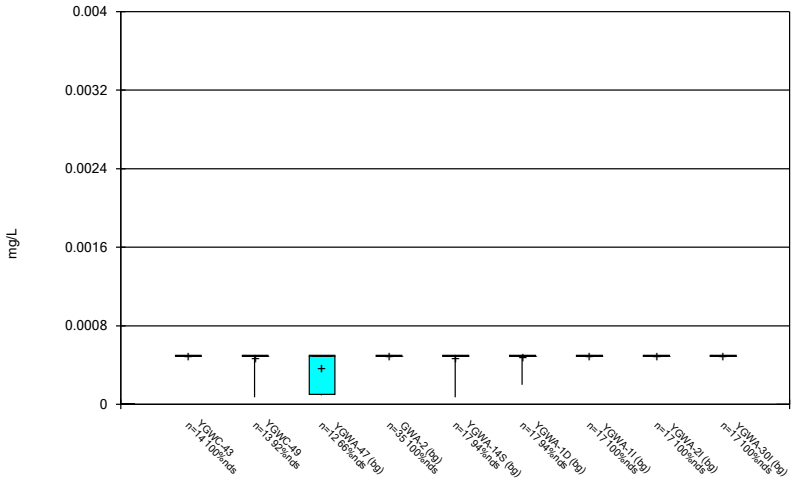


Constituent: Cadmium Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

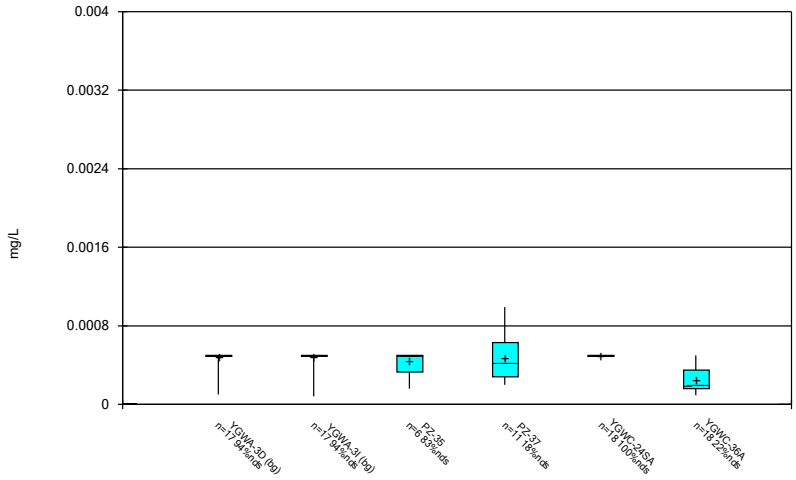


Constituent: Cadmium Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

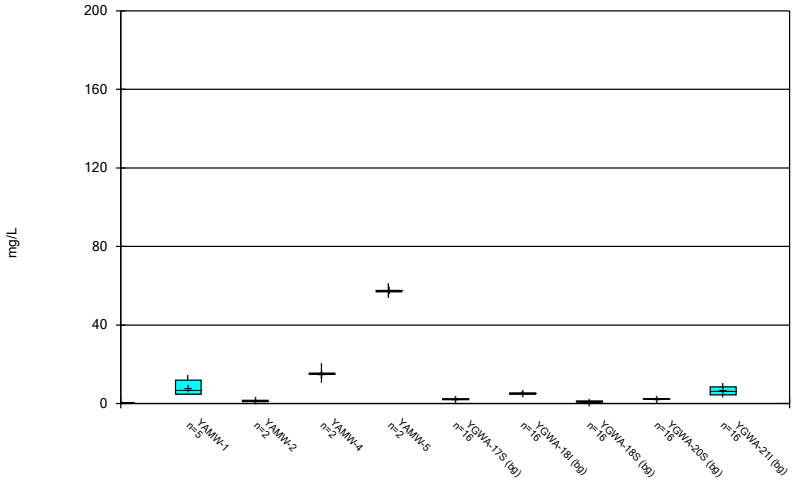
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

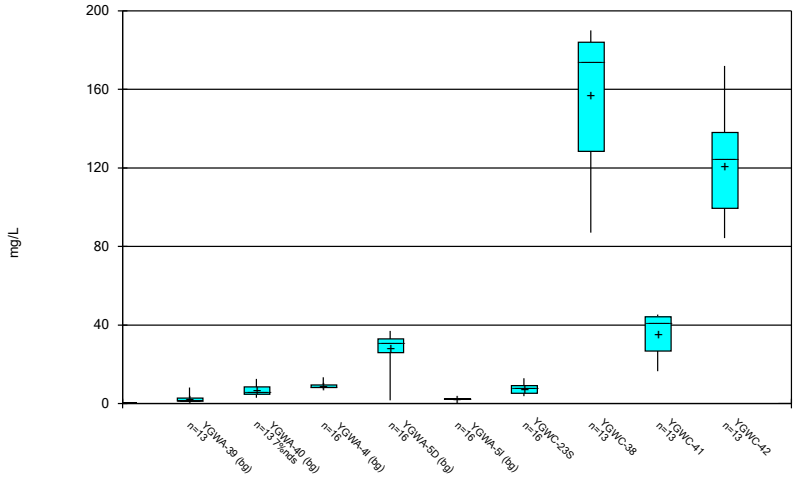


Constituent: Calcium Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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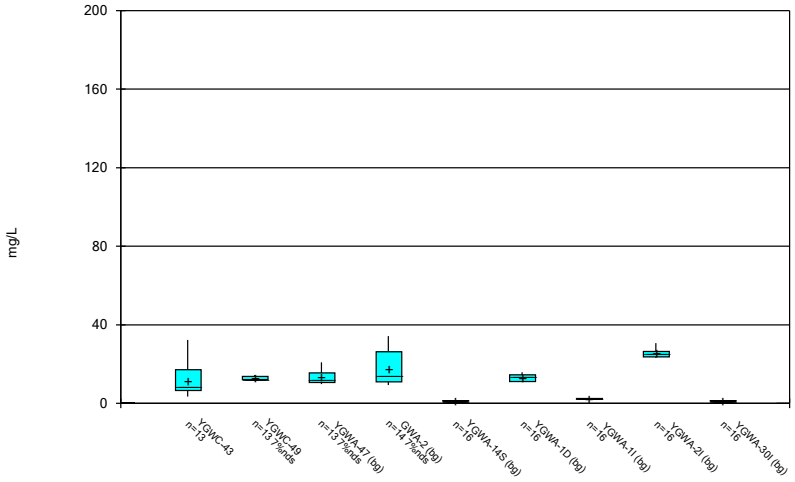
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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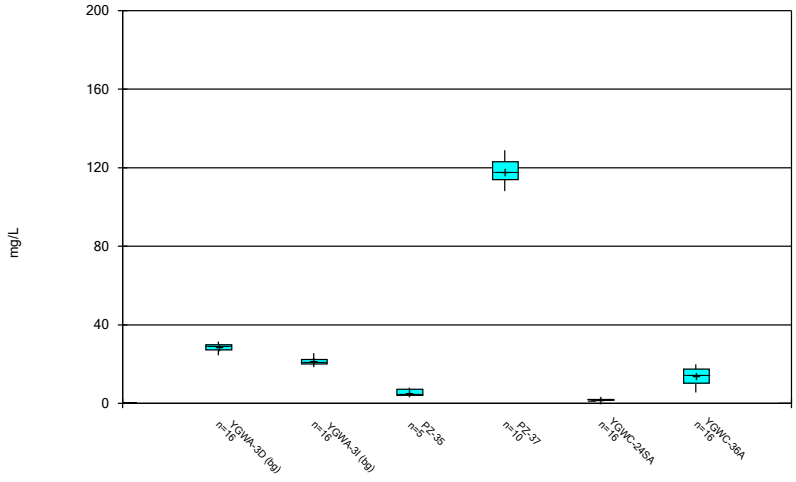
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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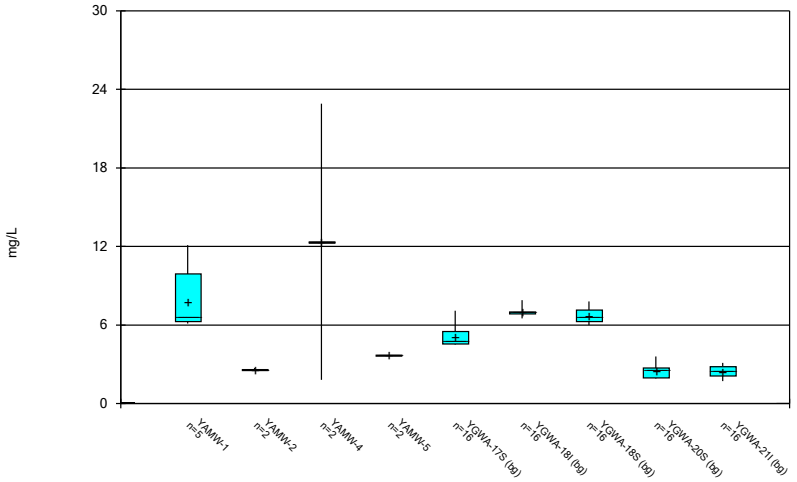
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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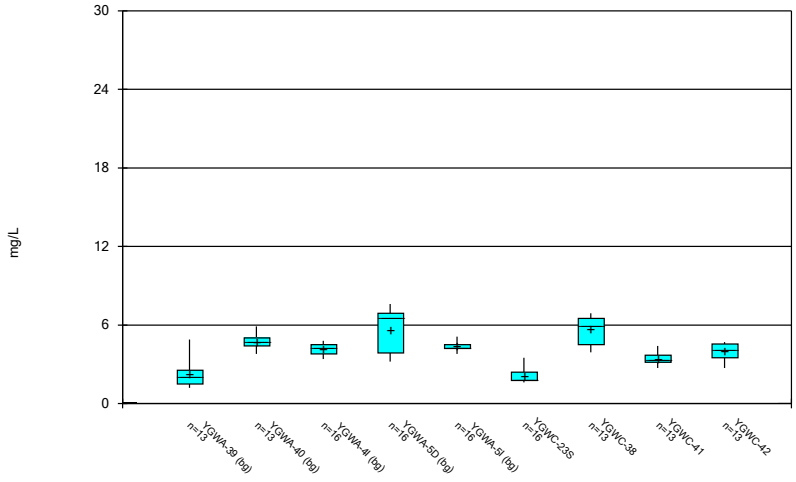
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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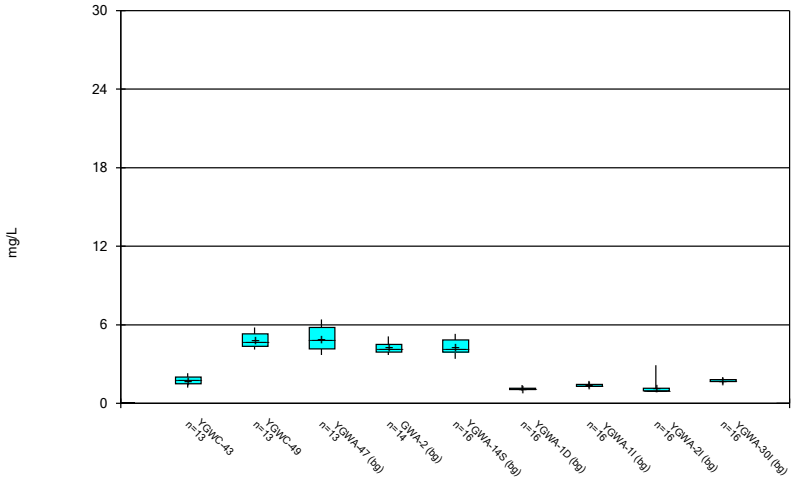
Box & Whiskers Plot



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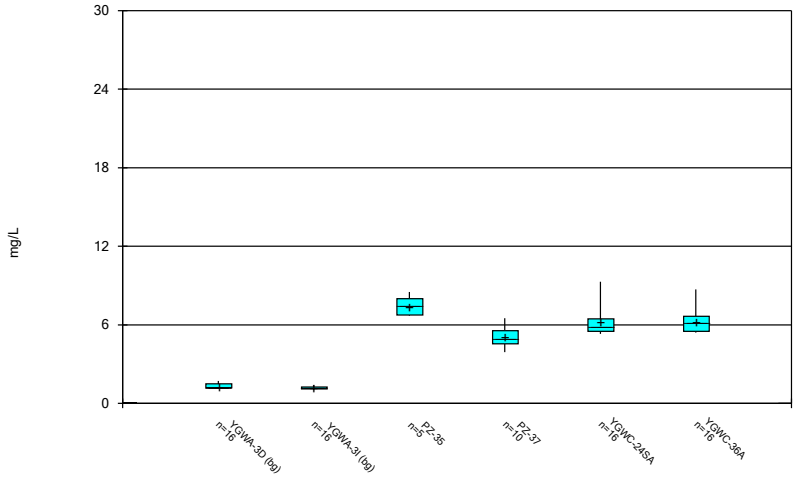
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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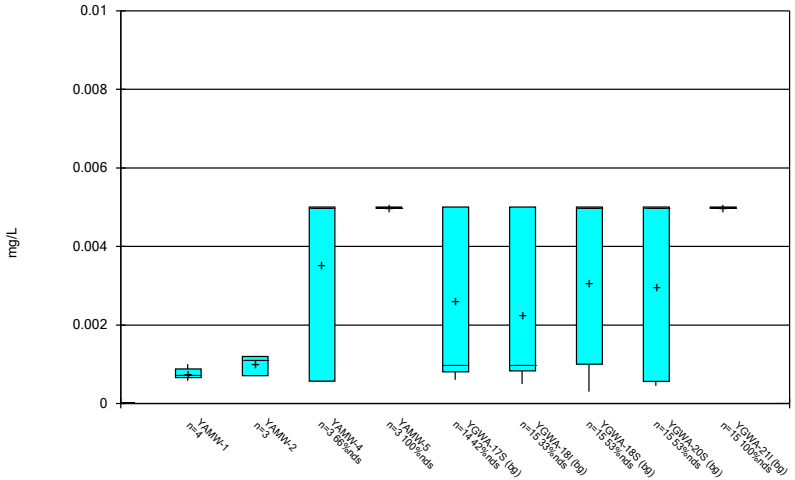
Box & Whiskers Plot



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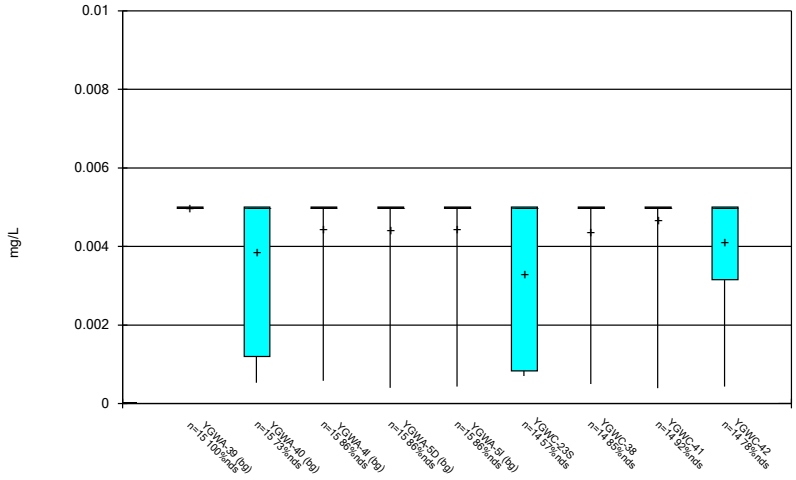
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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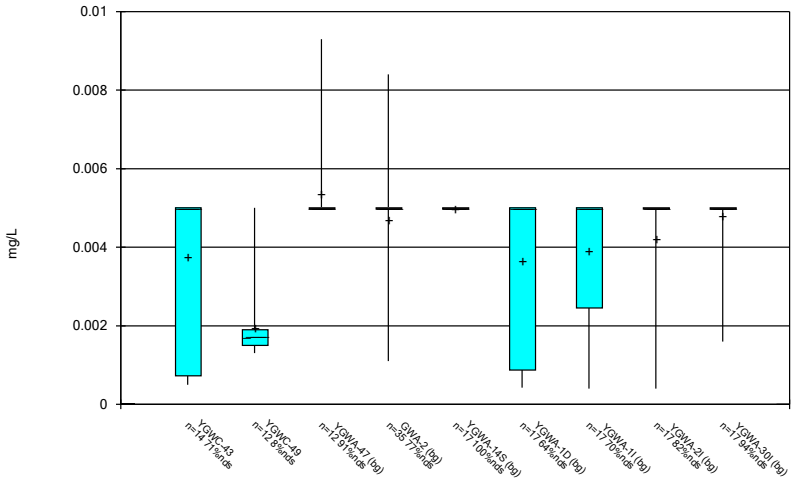
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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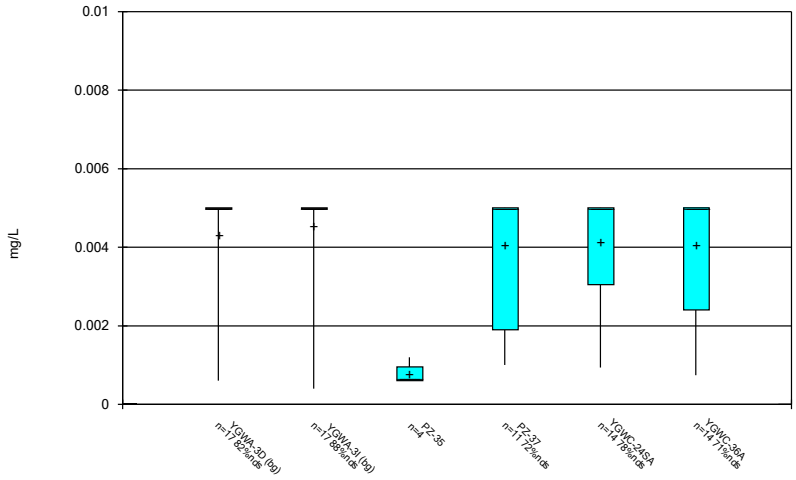
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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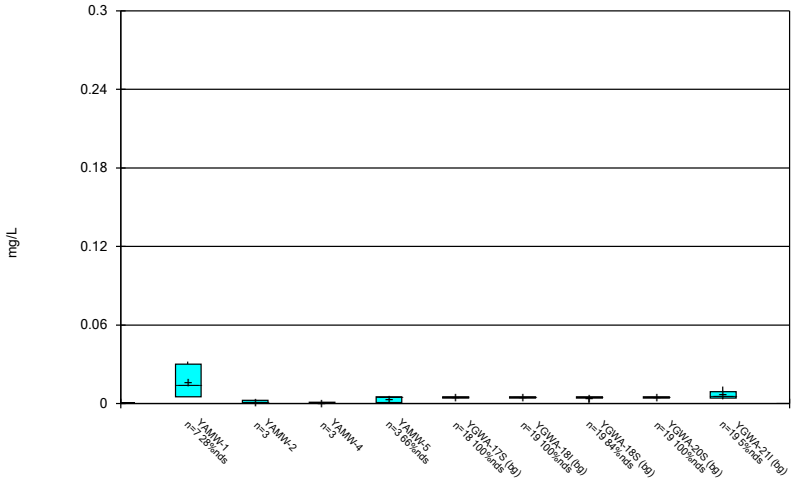
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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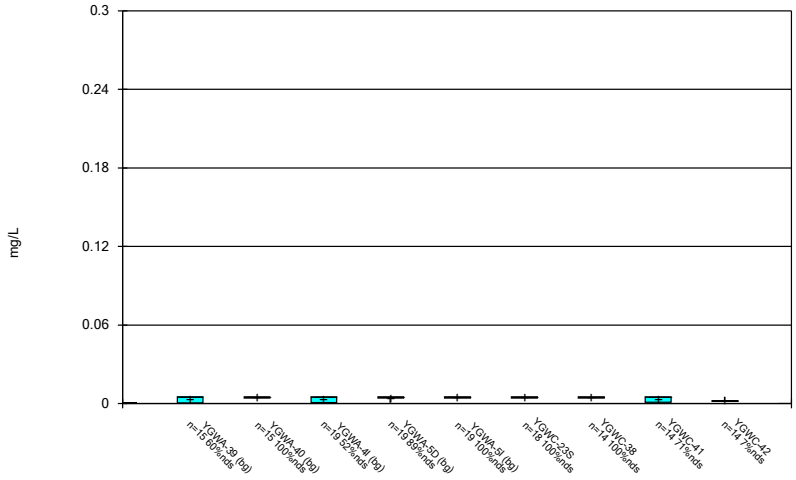
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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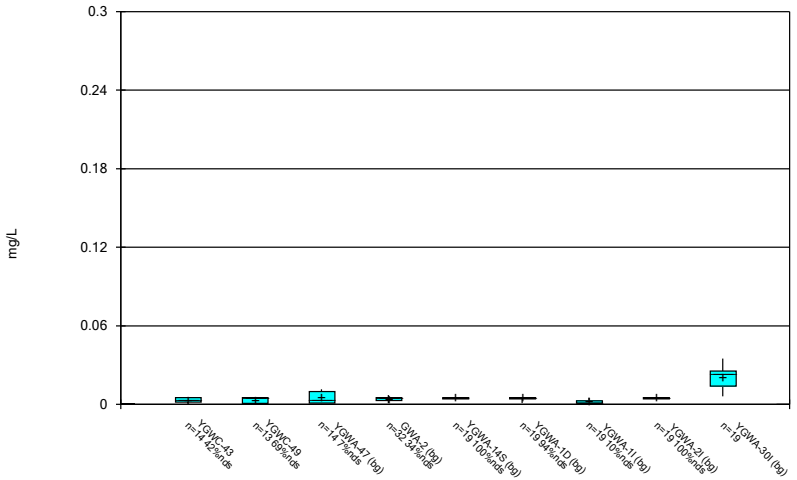
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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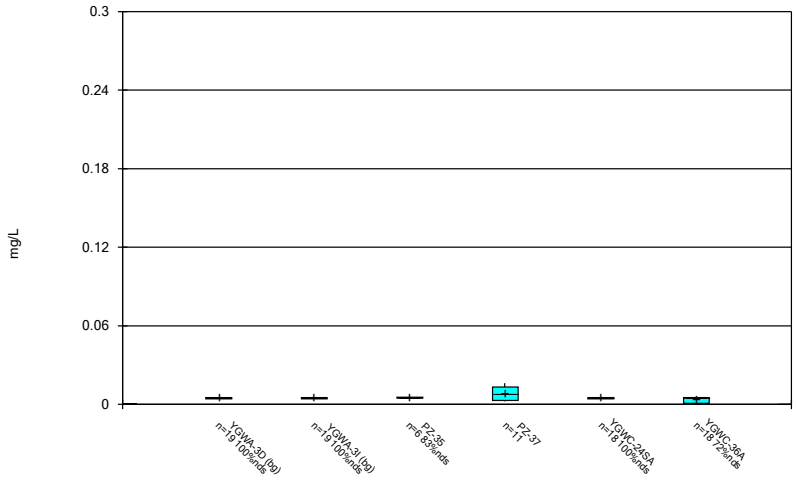
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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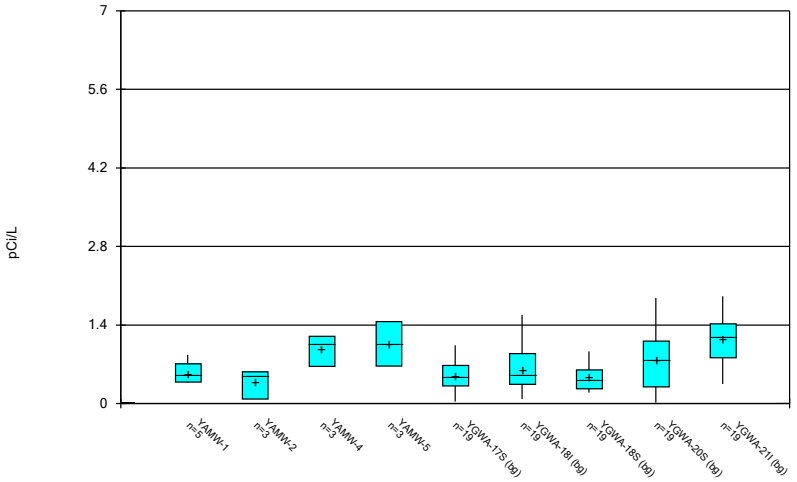
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

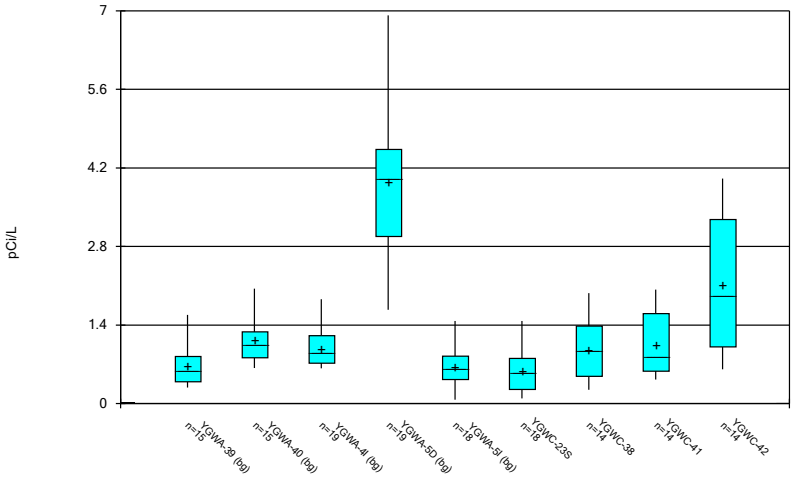
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 8:37 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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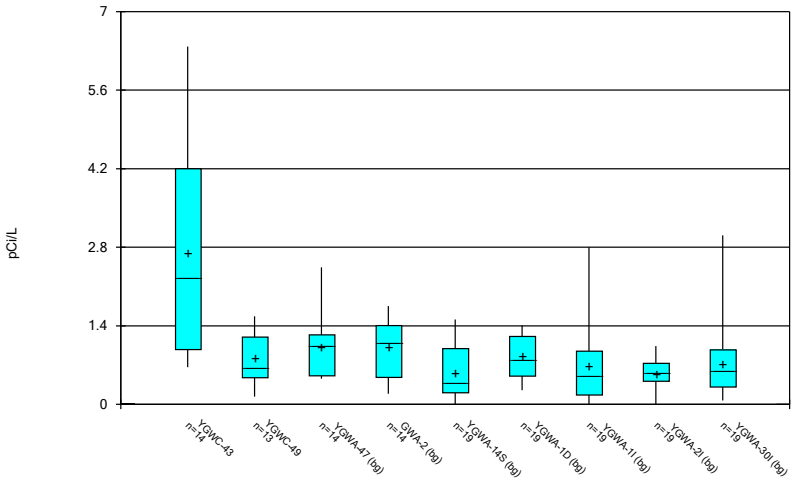
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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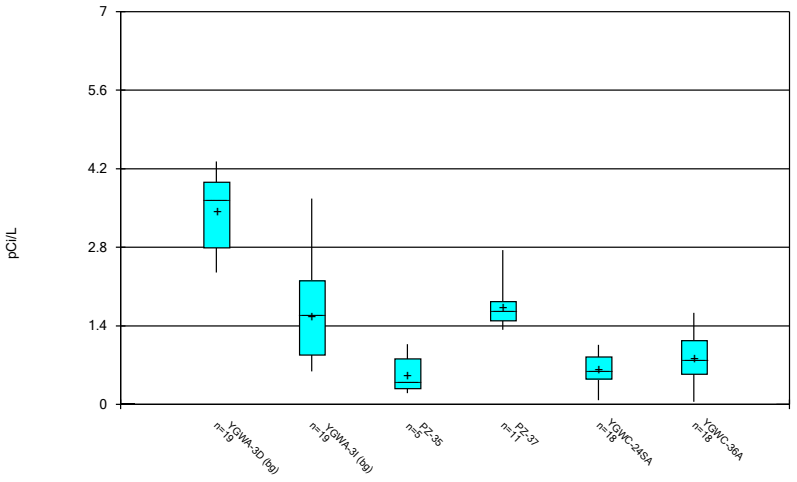
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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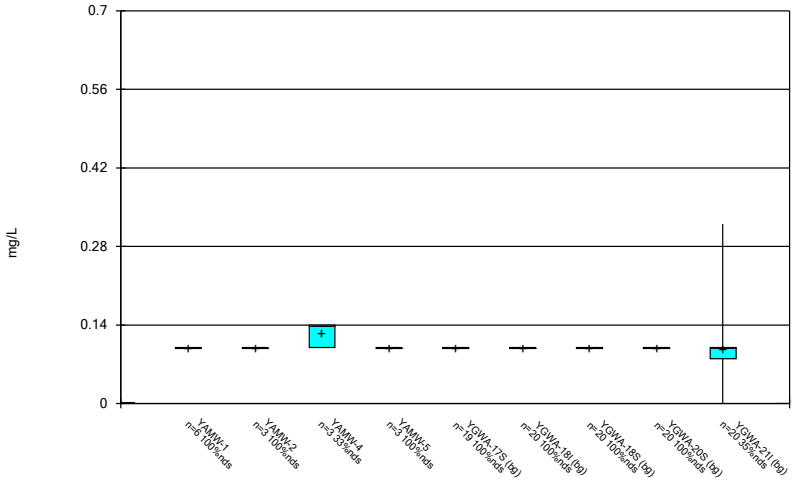
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

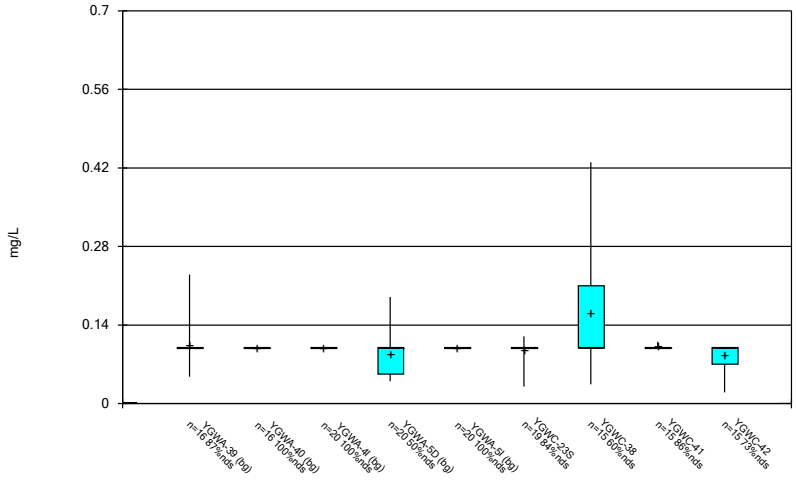


Constituent: Fluoride Analysis Run 5/6/2021 8:37 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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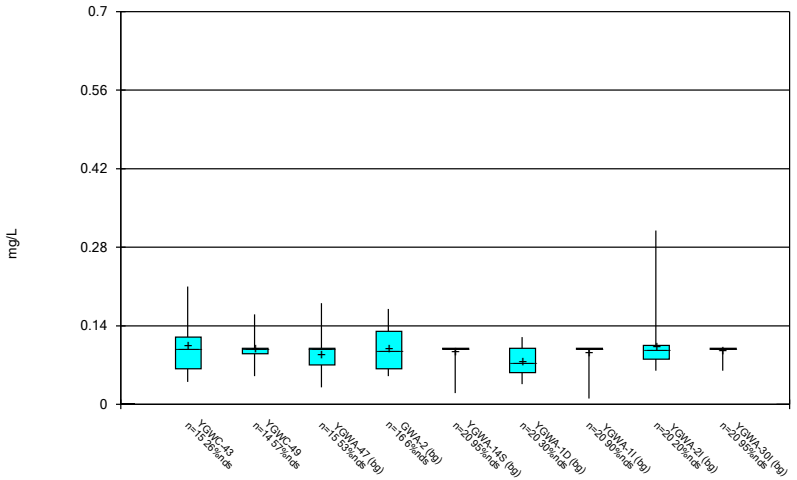
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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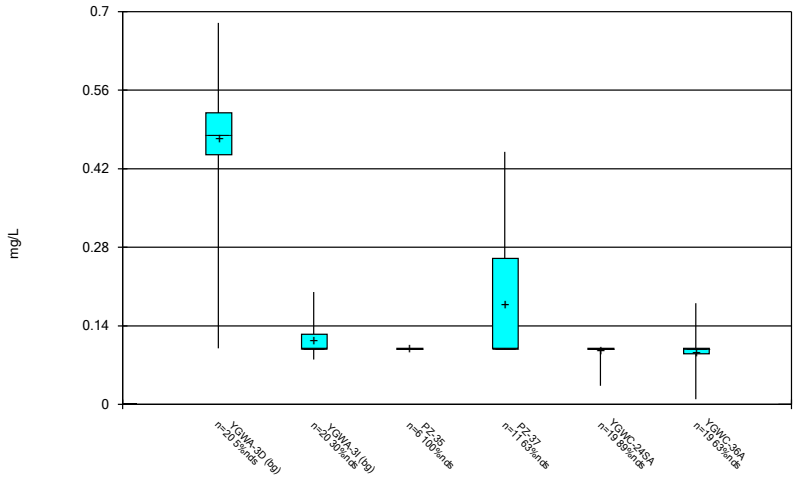
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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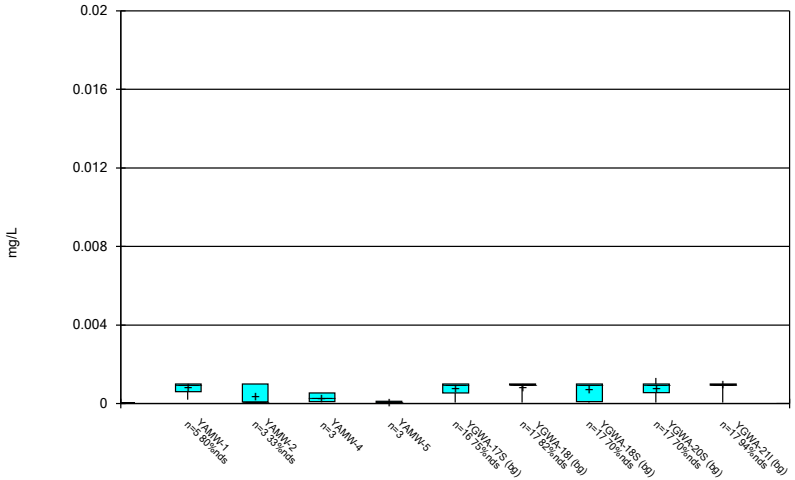
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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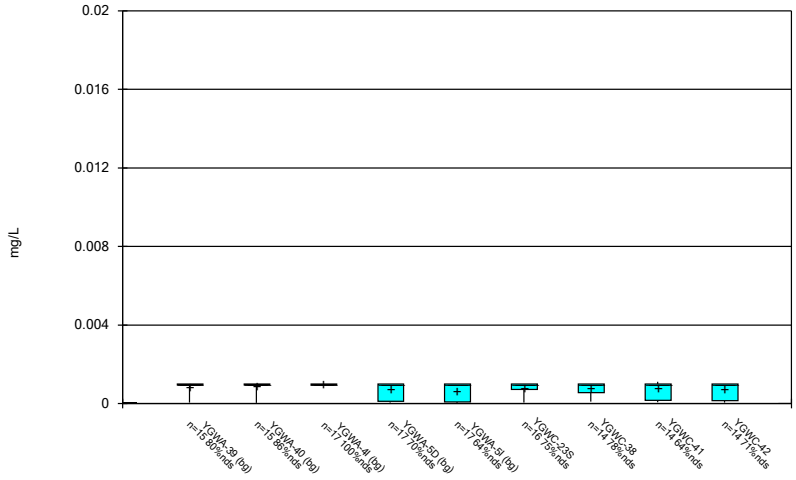
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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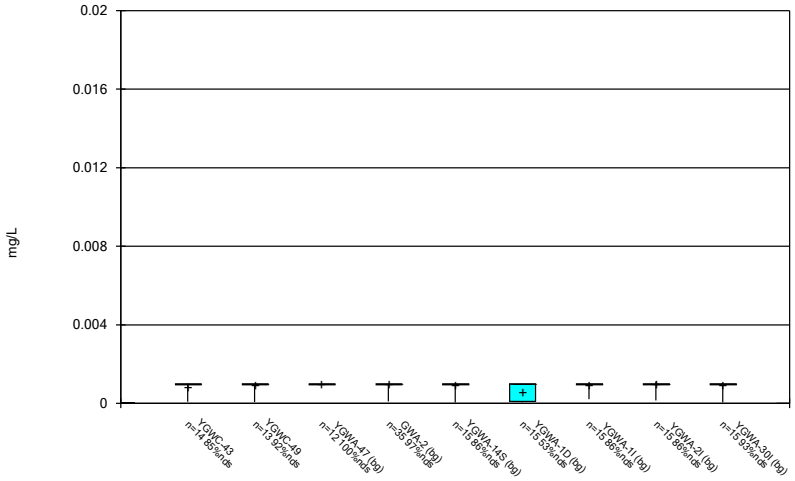
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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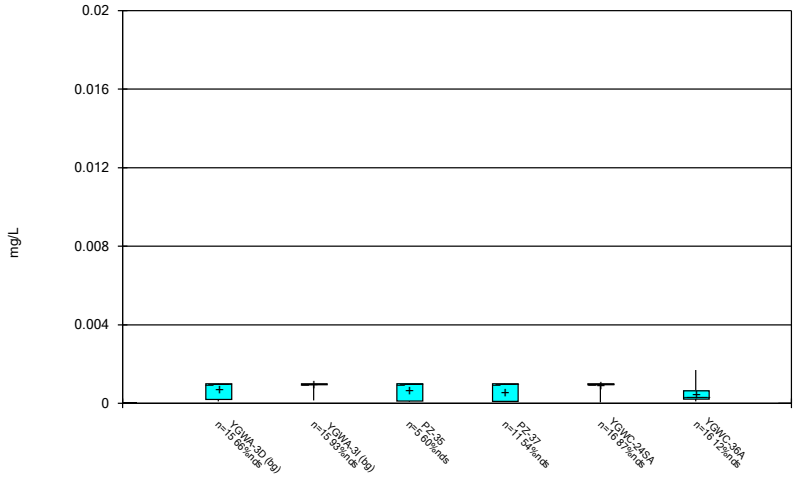
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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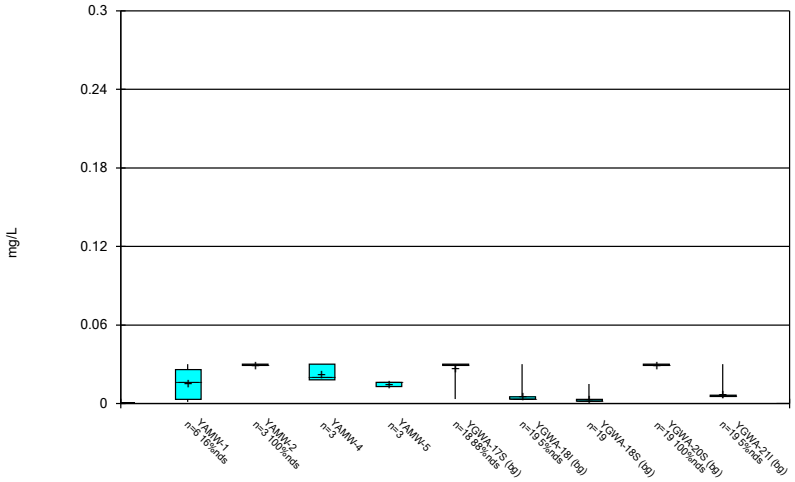
Box & Whiskers Plot



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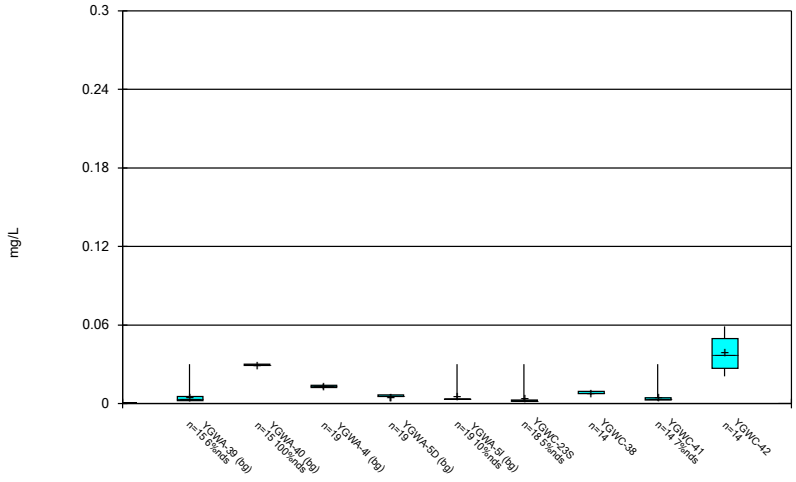
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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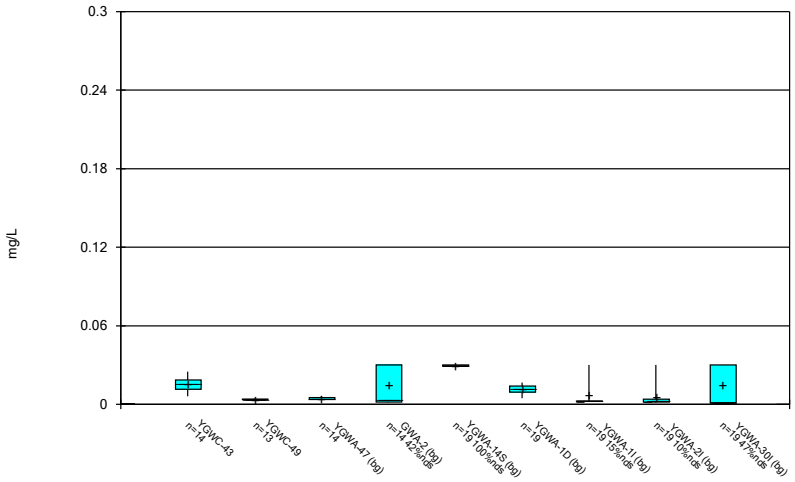
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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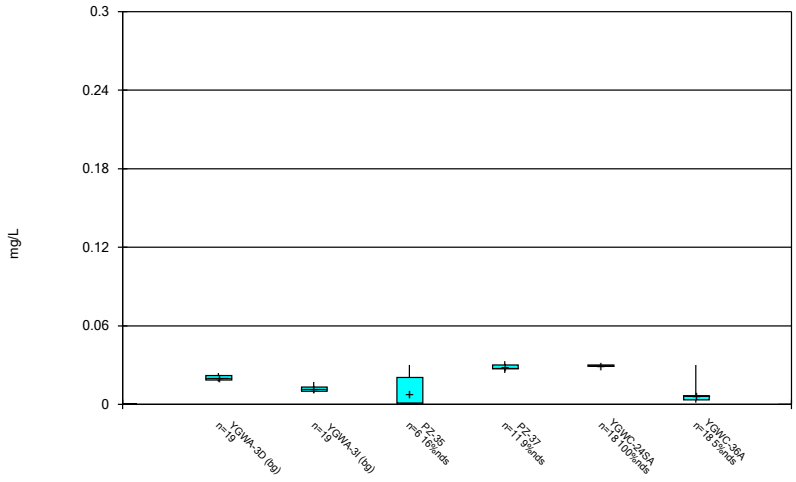
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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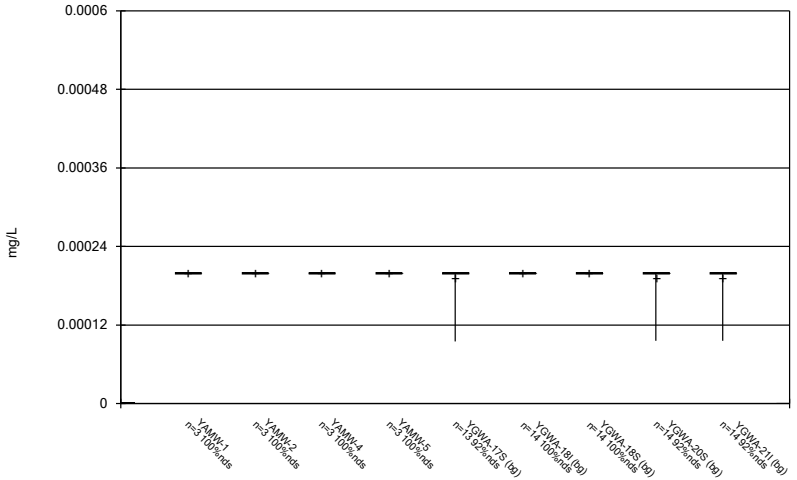
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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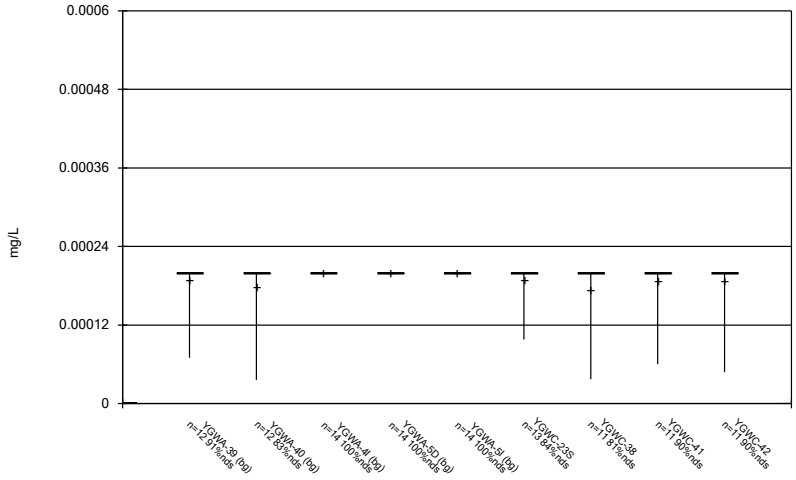
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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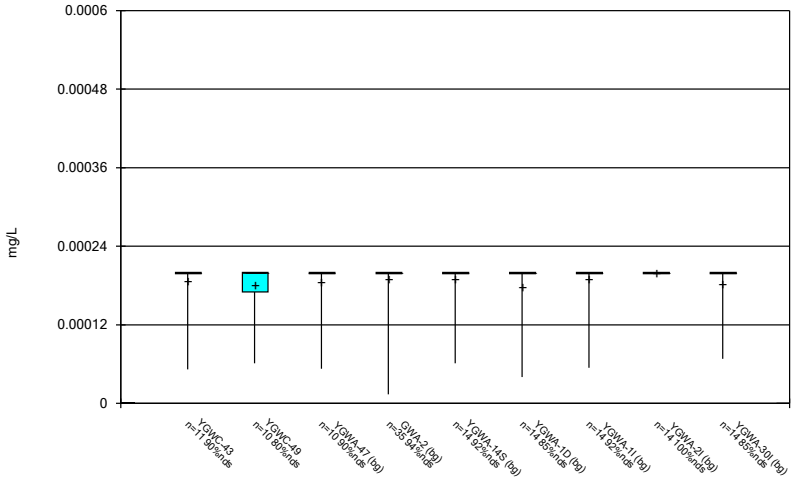
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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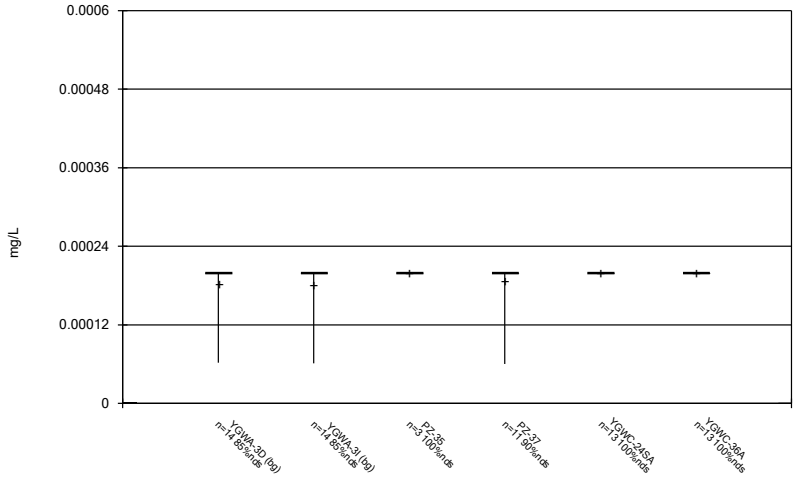
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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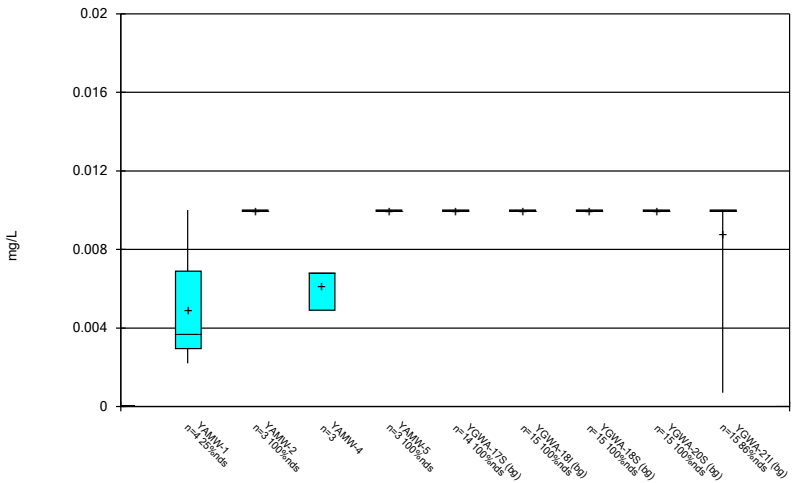
Box & Whiskers Plot

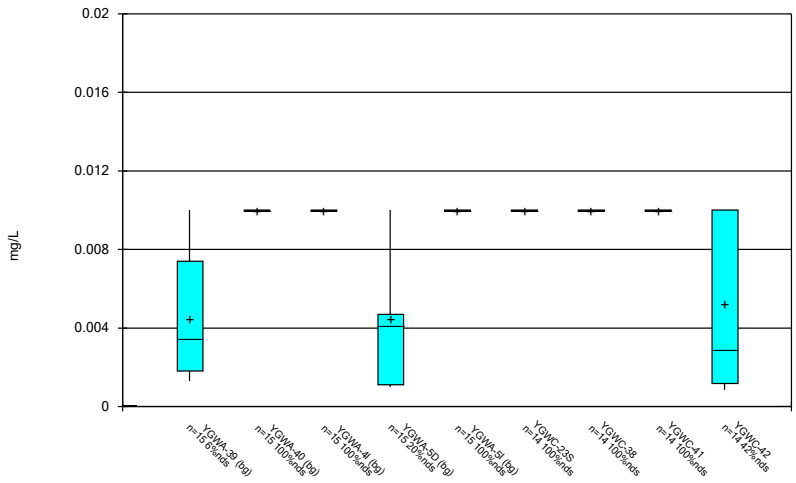


Constituent: Molybdenum Analysis Run 5/6/2021 8:38 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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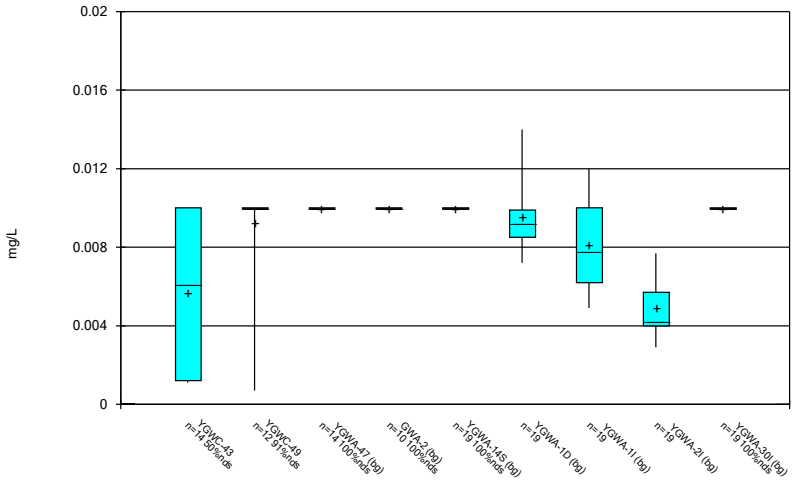
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

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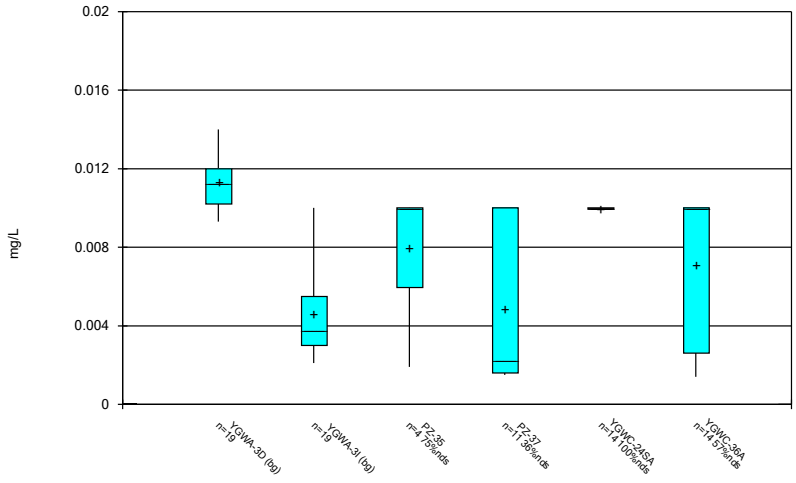

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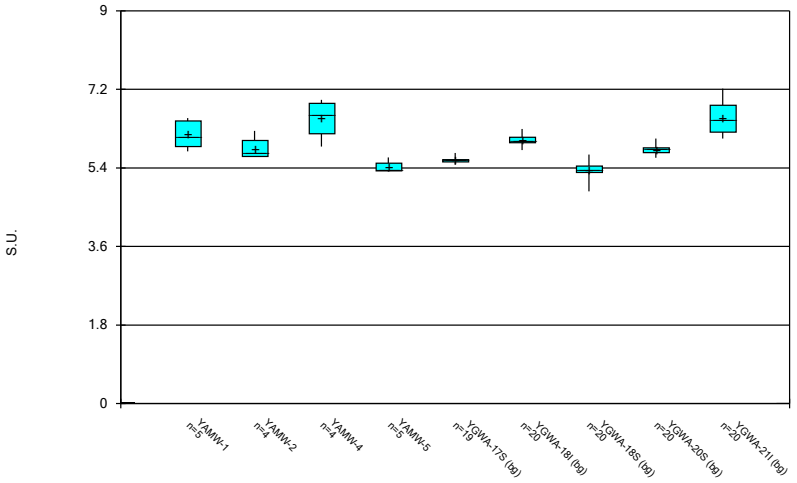
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

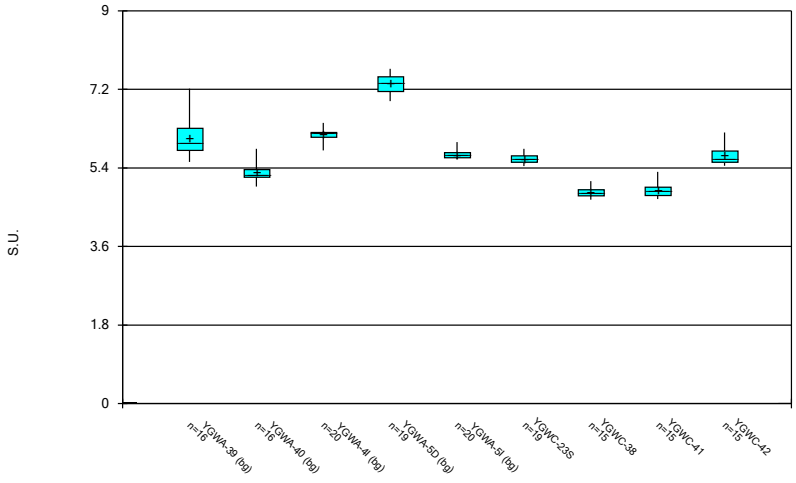


Constituent: pH Analysis Run 5/6/2021 8:38 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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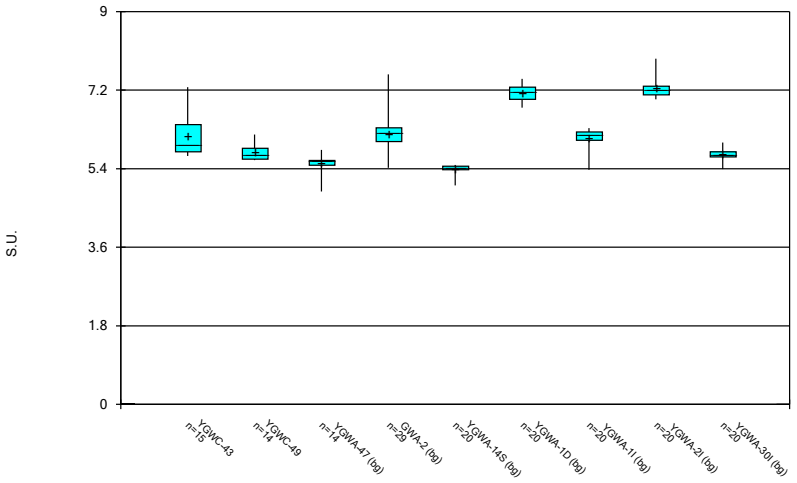
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot

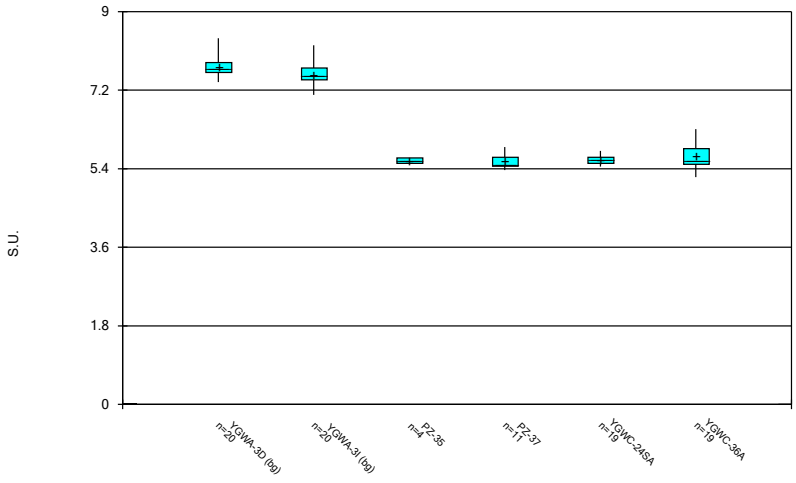


Constituent: pH Analysis Run 5/6/2021 8:38 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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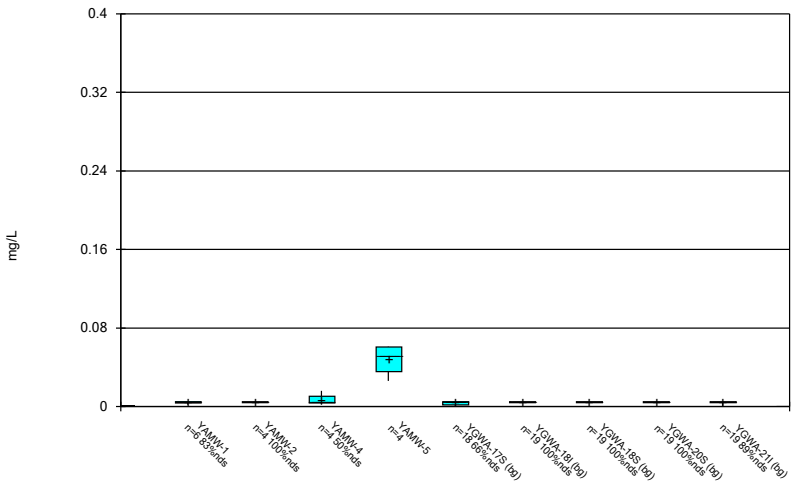
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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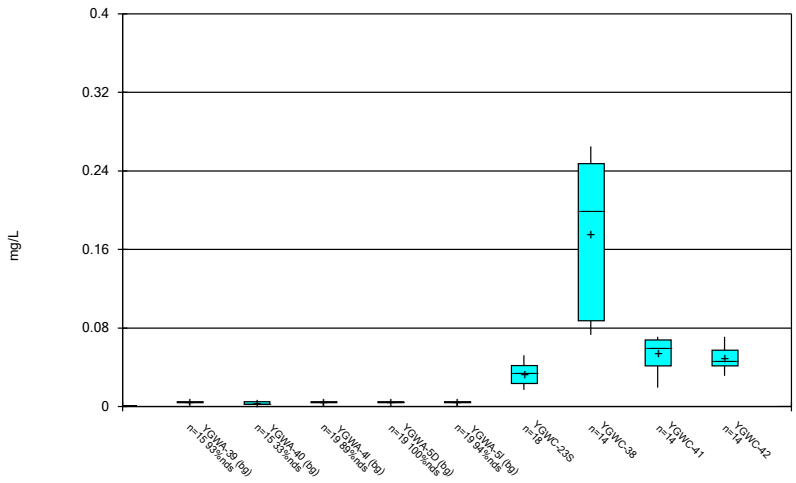
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

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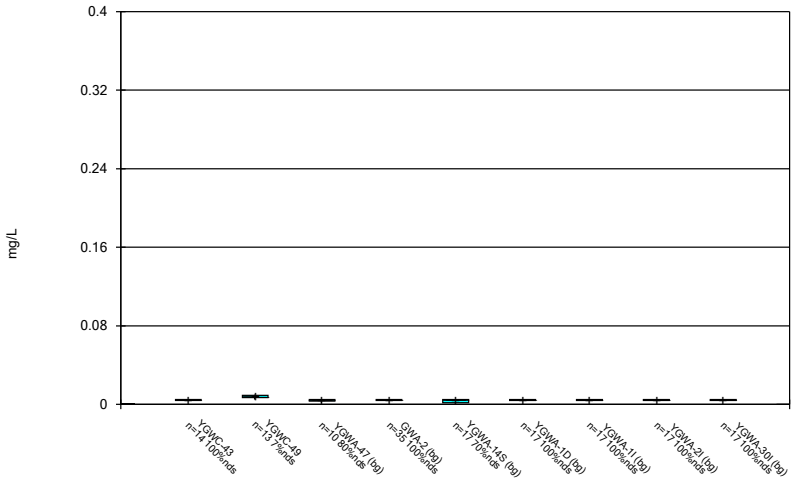

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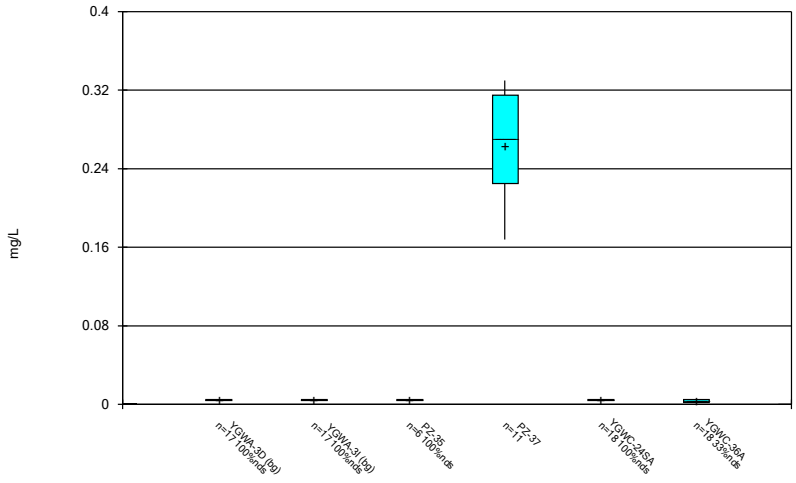
Box & Whiskers Plot



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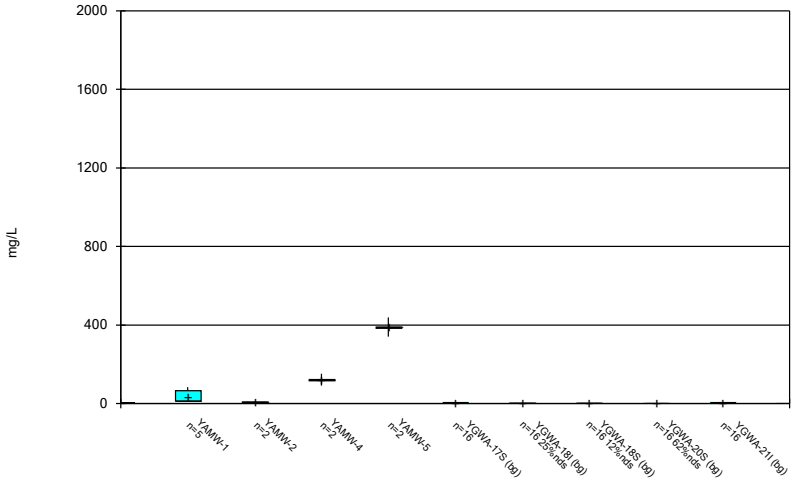

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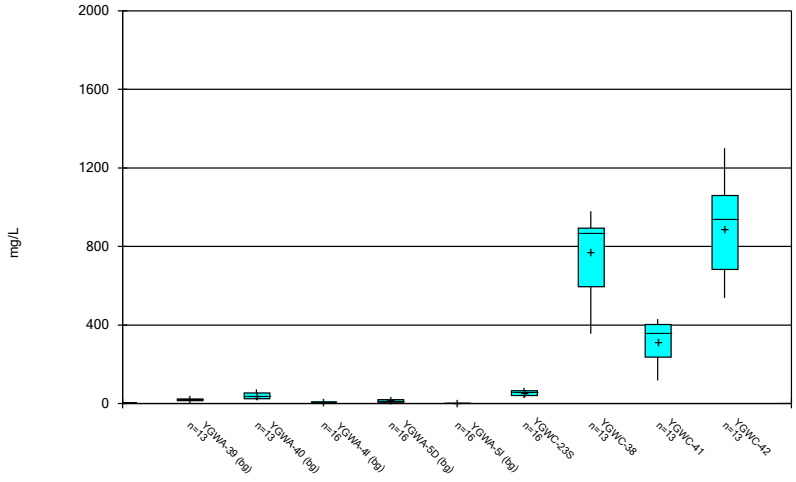
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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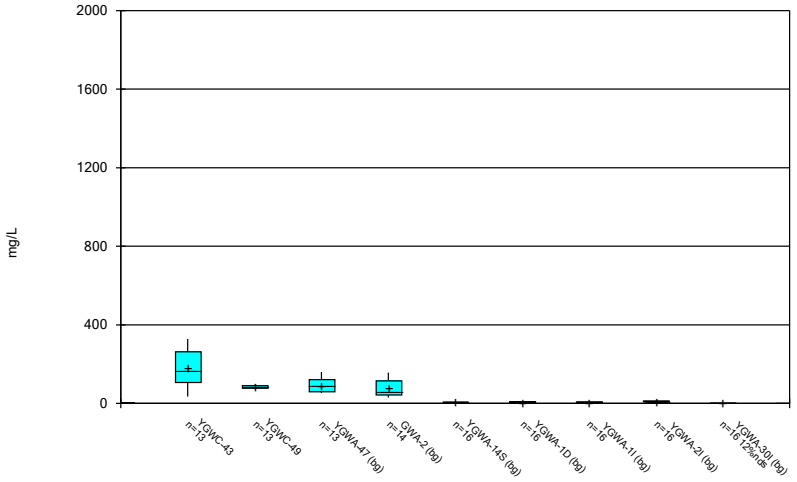

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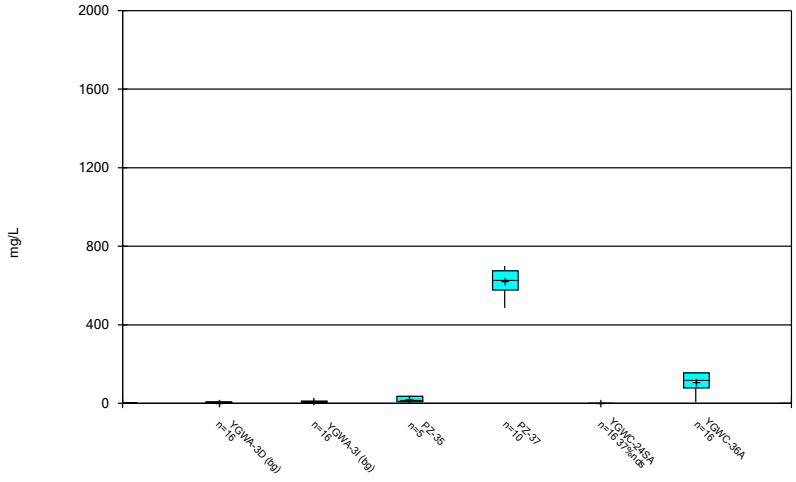
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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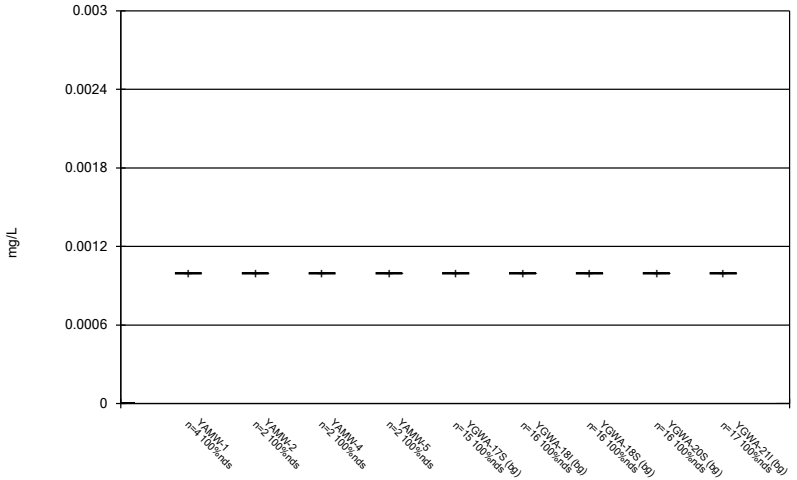
Box & Whiskers Plot



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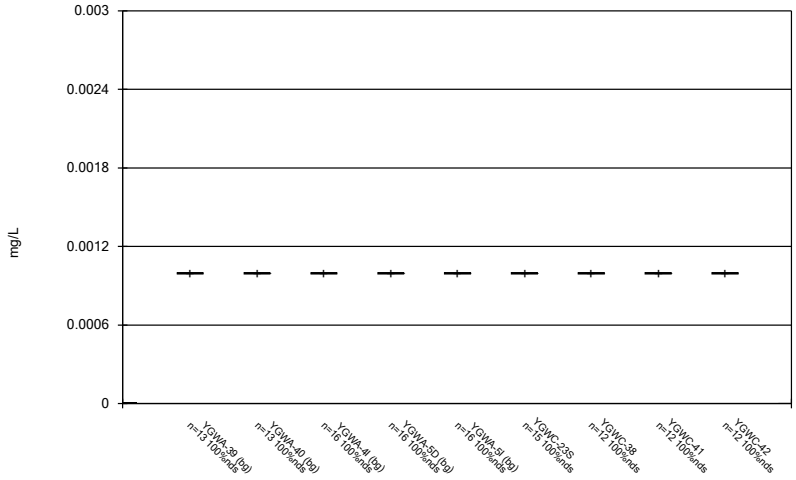
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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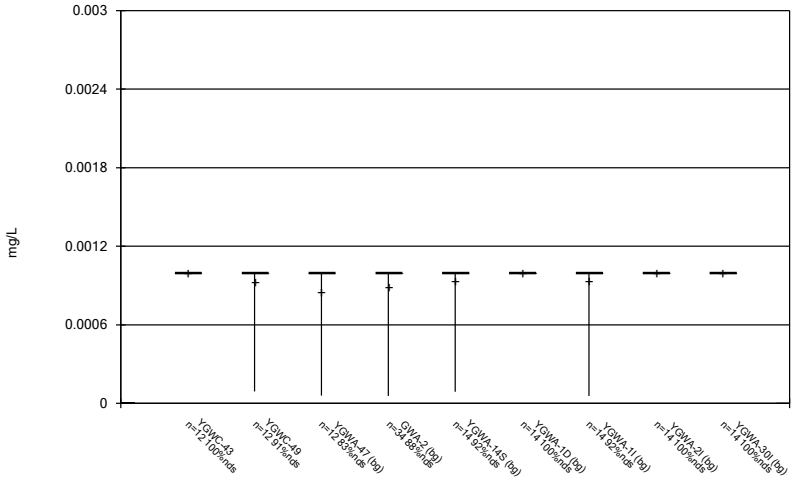
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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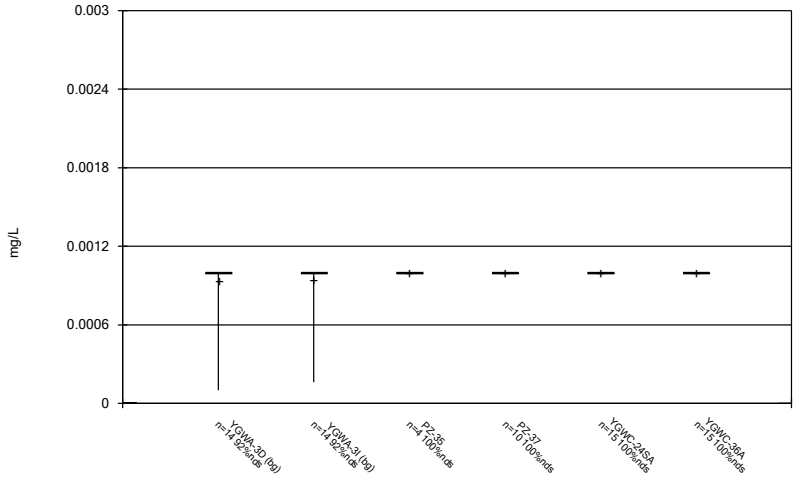
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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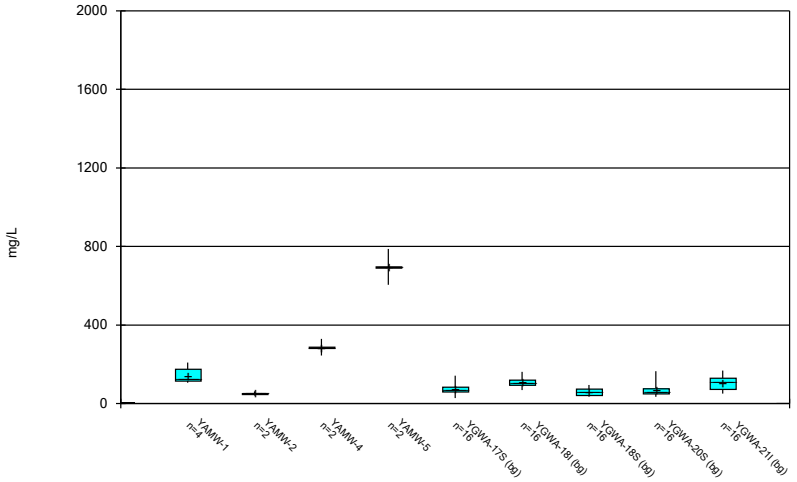
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

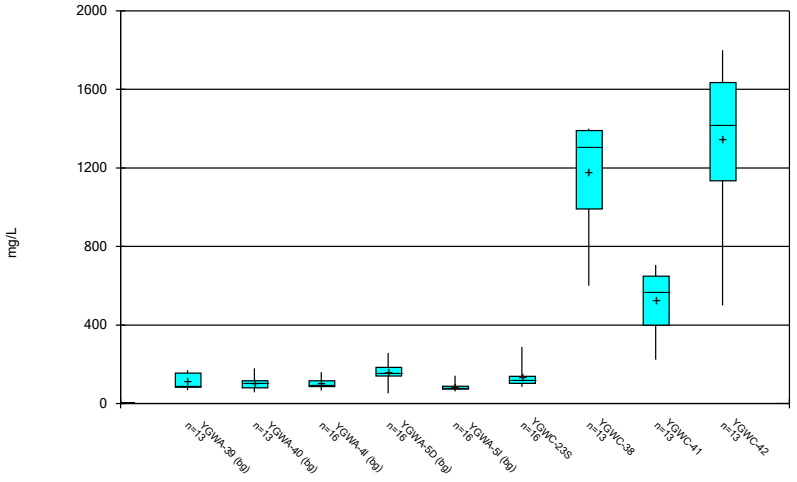
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:38 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

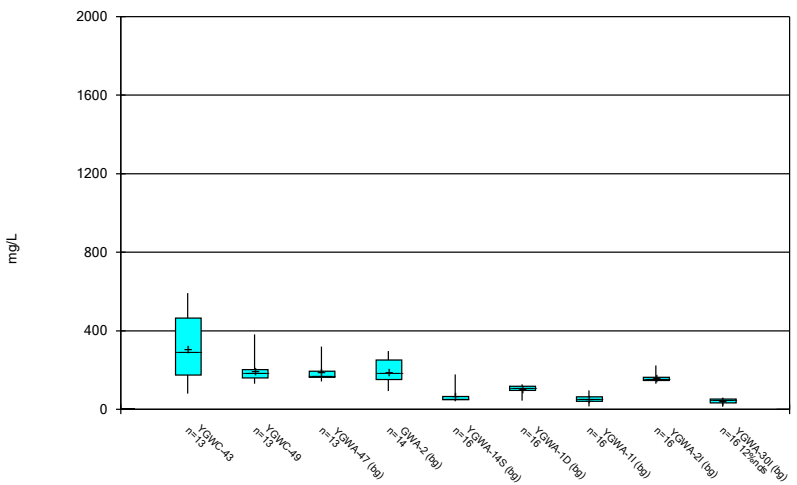
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:38 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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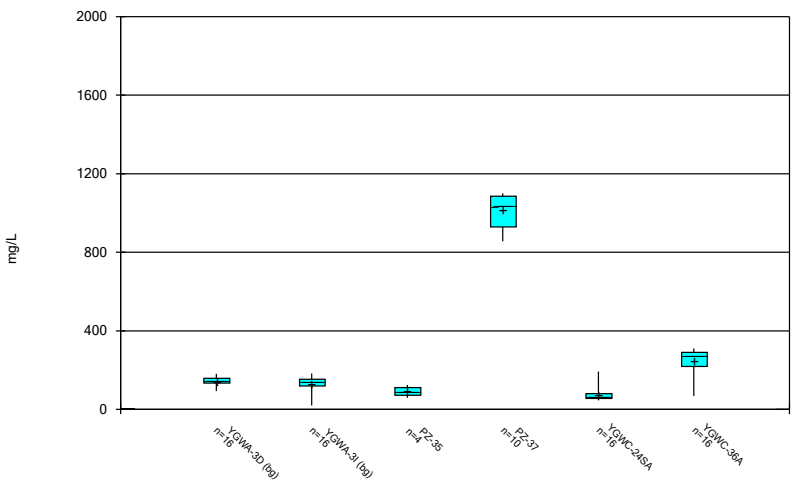
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:38 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

FIGURE C.

Outlier Summary

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:40 PM

	GWA-2 Cobalt (mg/L)	YGWA-47 pH (S.U.)
4/2/2018		6.3 (O)
8/26/2020	0.2 (O)	
9/22/2020	0.16 (O)	
3/2/2021	0.21 (O)	

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	YGWC-23S	0.16	n/a	3/4/2021	1.2	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-38	0.16	n/a	3/4/2021	6.4	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-41	0.16	n/a	3/4/2021	4	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-42	0.16	n/a	3/4/2021	14.8	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-43	0.16	n/a	3/4/2021	3.6	Yes	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-38	37	n/a	3/4/2021	87	Yes	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-42	37	n/a	3/4/2021	90.7	Yes	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-24SA	7.9	n/a	3/3/2021	8.6	Yes	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	8.39	4.86	3/4/2021	4.69	Yes	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-38	160	n/a	3/4/2021	356	Yes	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-42	160	n/a	3/4/2021	537	Yes	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-43	160	n/a	3/4/2021	328	Yes	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-38	221.5	n/a	3/4/2021	600	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-41	221.5	n/a	3/4/2021	224	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-42	221.5	n/a	3/4/2021	501	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-43	221.5	n/a	3/4/2021	592	Yes	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:46 PM

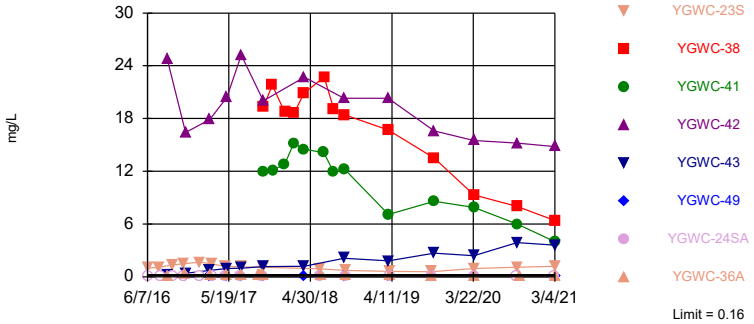
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**3/4/2021**	**1.2**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**3/4/2021**	**6.4**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**3/4/2021**	**4**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**3/4/2021**	**14.8**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**3/4/2021**	**3.6**	**Yes**	**293**	**n/a**	**n/a**	**45.73**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	3/4/2021	0.04ND	No	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-24SA	0.16	n/a	3/3/2021	0.04ND	No	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-36A	0.16	n/a	3/4/2021	0.0088J	No	293	n/a	n/a	45.73	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	3/4/2021	10.2	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**3/4/2021**	**87**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	3/4/2021	16.4	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**3/4/2021**	**90.7**	**Yes**	**293**	**n/a**	**n/a**	**1.024**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	3/4/2021	32.2	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	3/4/2021	13	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24SA	37	n/a	3/3/2021	2.4	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-36A	37	n/a	3/4/2021	5.6	No	293	n/a	n/a	1.024	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	7.9	n/a	3/4/2021	1.8	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-38	7.9	n/a	3/4/2021	3.9	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-41	7.9	n/a	3/4/2021	3.4	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-42	7.9	n/a	3/4/2021	2.7	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-43	7.9	n/a	3/4/2021	2.1	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-49	7.9	n/a	3/4/2021	4.1	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	**YGWC-24SA**	**7.9**	**n/a**	**3/3/2021**	**8.6**	**Yes**	**293**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	YGWC-36A	7.9	n/a	3/4/2021	6.6	No	293	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-23S	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.68	n/a	3/4/2021	0.063J	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24SA	0.68	n/a	3/3/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36A	0.68	n/a	3/4/2021	0.1ND	No	362	n/a	n/a	68.51	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	8.39	4.86	3/4/2021	5.44	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	8.39	4.86	3/4/2021	5.01	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	**YGWC-41**	**8.39**	**4.86**	**3/4/2021**	**4.69**	**Yes**	**373**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00009834**	**NP Inter (normality) 1 of 2**
pH (S.U.)	YGWC-42	8.39	4.86	3/4/2021	5.59	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	8.39	4.86	3/4/2021	5.88	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	8.39	4.86	3/4/2021	5.88	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24SA	8.39	4.86	3/3/2021	5.7	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-36A	8.39	4.86	3/4/2021	5.67	No	373	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-23S	160	n/a	3/4/2021	61.7	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**3/4/2021**	**356**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-41	160	n/a	3/4/2021	117	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**3/4/2021**	**537**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-43**	**160**	**n/a**	**3/4/2021**	**328**	**Yes**	**293**	**n/a**	**n/a**	**6.143**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-49	160	n/a	3/4/2021	75.1	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24SA	160	n/a	3/3/2021	0.5ND	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-36A	160	n/a	3/4/2021	6.3	No	293	n/a	n/a	6.143	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-23S	221.5	n/a	3/4/2021	96	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**221.5**	**n/a**	**3/4/2021**	**600**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**221.5**	**n/a**	**3/4/2021**	**224**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**221.5**	**n/a**	**3/4/2021**	**501**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-43**	**221.5**	**n/a**	**3/4/2021**	**592**	**Yes**	**293**	**10.01**	**2.574**	**0.6826**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-49	221.5	n/a	3/4/2021	145	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24SA	221.5	n/a	3/3/2021	70	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-36A	221.5	n/a	3/4/2021	69	No	293	10.01	2.574	0.6826	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43

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 293 background values. 45.73% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

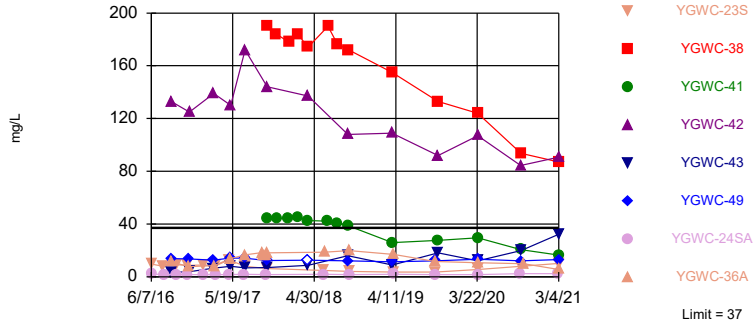
Constituent: Boron Analysis Run 5/6/2021 8:43 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-38, YGWC-42

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 293 background values. 1.024% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

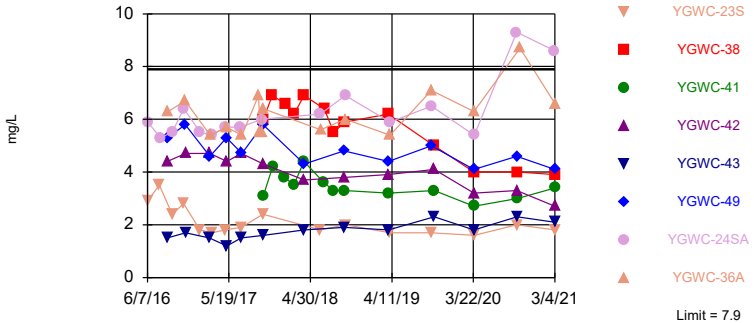
Constituent: Calcium Analysis Run 5/6/2021 8:43 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Exceeds Limit: YGWC-24SA

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 293 background values. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

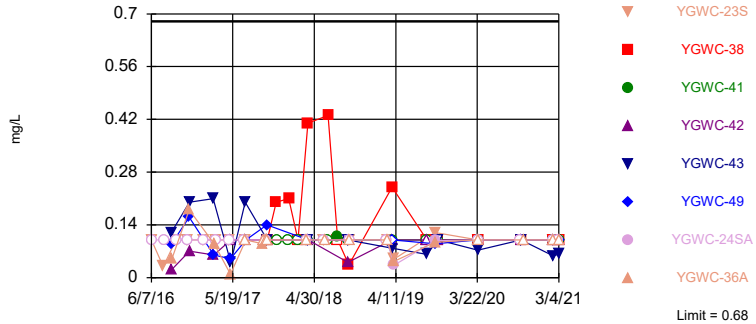
Constituent: Chloride Analysis Run 5/6/2021 8:43 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 362 background values. 68.51% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

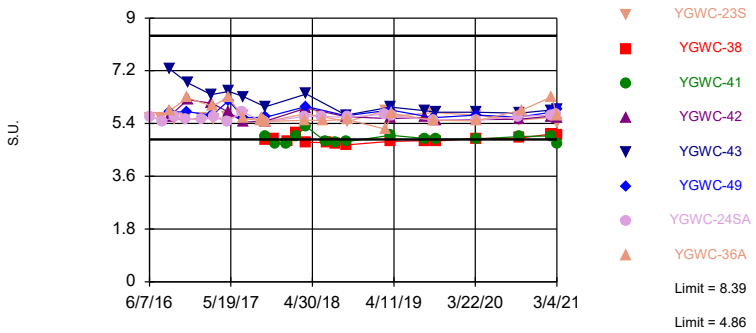
Constituent: Fluoride Analysis Run 5/6/2021 8:43 PM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Exceeds Limits: YGWC-41

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 373 background values. Annual per-constituent alpha = 0.001573. Individual comparison alpha = 0.00009834 (1 of 2). Comparing 8 points to limit.

Constituent: pH Analysis Run 5/6/2021 8:43 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

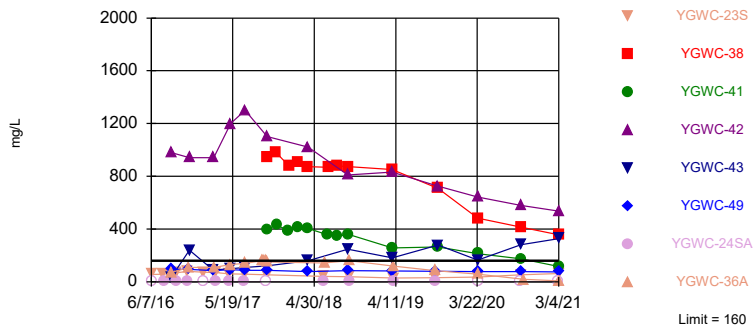
Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: YGWC-38, YGWC-42, YGWC-43

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 293 background values. 6.143% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate Analysis Run 5/6/2021 8:43 PM View: Appendix III

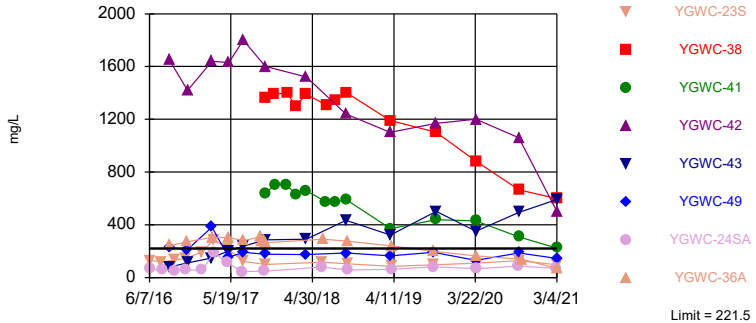
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Exceeds Limit: YGWC-38, YGWC-41, YGWC-42, YGWC-43

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=10.01, Std. Dev.=2.574, n=293, 0.6826% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.97, critical = 14.07. Kappa = 1.894 (c=7, w=8, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.0009403. Comparing 8 points to limit.

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:43 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (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									
6/8/2016									
7/25/2016	<0.04		<0.04				<0.04		
7/26/2016		0.0055 (J)		0.0052 (J)	0.0177 (J)	0.0097 (J)		<0.04	0.0047 (J)
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		<0.04	<0.04						
9/14/2016	<0.04			0.0071 (J)				0.01 (J)	<0.04
9/15/2016					0.0214 (J)	0.0102 (J)			
9/16/2016									
9/19/2016							<0.04		
9/20/2016									
11/1/2016	<0.04	0.0086 (J)				<0.04	<0.04		
11/2/2016				<0.04	<0.04				<0.04
11/3/2016									
11/4/2016			<0.04					<0.04	
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017					0.0198 (J)				
1/11/2017	<0.04	0.0074 (J)				<0.04			
1/12/2017				0.0076 (J)				<0.04	
1/13/2017									<0.04
1/16/2017			<0.04				<0.04		
1/17/2017									
2/21/2017							<0.04		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	<0.04								
3/2/2017		0.008 (J)	<0.04			0.0084 (J)			
3/3/2017									
3/6/2017									<0.04
3/7/2017				0.0089 (J)				<0.04	
3/8/2017					0.0189 (J)				
3/9/2017									
4/26/2017	<0.04				0.0161 (J)	<0.04	<0.04		
4/27/2017		0.0066 (J)	<0.04						
4/28/2017									
5/1/2017				0.0061 (J)					<0.04

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
5/2/2017								<0.04	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		0.0087 (J)	0.006 (J)	0.0079 (J)				<0.04	
6/28/2017	<0.04					<0.04			
6/29/2017									<0.04
6/30/2017					0.0173 (J)		<0.04		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		0.0072 (J)	0.0071 (J)	0.0094 (J)				<0.04	
10/4/2017	<0.04					<0.04	<0.04		
10/5/2017					0.0173 (J)				<0.04
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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						0.004 (J)		<0.04	0.0045 (J)
6/8/2018	<0.04				0.013 (J)				
6/11/2018							0.014 (J)		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018				0.01 (J)				0.0057 (J)	0.005 (J)
9/27/2018									
10/1/2018	<0.04	0.021 (J)	0.0049 (J)		0.015 (J)	<0.04			

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
10/2/2018							<0.04		
2/25/2019									
3/26/2019									
3/27/2019									
3/28/2019		0.005 (J)	<0.04						
3/29/2019					0.014 (J)				
4/1/2019	<0.04					<0.04	<0.04		
4/2/2019									
4/3/2019				0.0076 (J)				0.0044 (J)	0.0055 (J)
4/4/2019									
6/12/2019									
9/24/2019		0.0064 (J)	0.0055 (J)	0.01 (J)				0.0049 (J)	
9/25/2019	<0.04				0.018 (J)	0.0054 (J)	<0.04		<0.04
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020			0.0087 (J)		0.02 (J)				
3/19/2020	0.0053 (J)	0.0085 (J)				0.0073 (J)	0.0052 (J)		
3/24/2020				0.011 (J)				0.0068 (J)	
3/25/2020									0.011 (J)
3/26/2020									
9/22/2020				0.0079 (J)				0.0053 (J)	<0.04
9/23/2020	0.0073 (J)	<0.04	<0.04			0.012 (J)			
9/24/2020							0.0075 (J)		
9/25/2020					0.02 (J)				
10/7/2020									
3/1/2021							<0.04		
3/2/2021				0.0068 (J)	0.017 (J)			0.011 (J)	
3/3/2021	<0.04	<0.04	<0.04			<0.04			0.0056 (J)
3/4/2021									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
6/1/2016									
6/2/2016									
6/6/2016	<0.04	<0.04							
6/7/2016			0.99	<0.04	<0.04	<0.04			
6/8/2016							<0.04		
7/25/2016									
7/26/2016									
7/27/2016	<0.04	0.0059 (J)			<0.04	0.008 (J)			
7/28/2016			1.09	<0.04					
8/1/2016							<0.04		
8/30/2016								0.0166 (J)	24.7
8/31/2016									
9/1/2016									
9/2/2016									
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				
9/20/2016			1.35				<0.04		
11/1/2016									
11/2/2016					<0.04				
11/3/2016	<0.04	0.0082 (J)		<0.04		0.0077 (J)			
11/4/2016									
11/8/2016			1.5				<0.04		
11/14/2016								0.0166 (J)	
11/15/2016									
11/16/2016									16.4
11/28/2016									
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			1.67						
1/17/2017							<0.04		
2/21/2017									
2/22/2017									
2/24/2017								0.0145 (J)	
2/27/2017									17.9
2/28/2017									
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							<0.04		
3/9/2017			1.44						
4/26/2017	<0.04	0.0091 (J)		<0.04	<0.04				
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
5/2/2017			1.2			<0.04	0.0099 (J)		
5/8/2017								0.0141 (J)	
5/9/2017									
5/10/2017									20.4
5/26/2017									
6/27/2017									
6/28/2017	<0.04	0.0079 (J)							
6/29/2017				<0.04	<0.04	0.0074 (J)			
6/30/2017									
7/7/2017							0.0076 (J)		
7/10/2017			1.12						
7/11/2017								0.0131 (J)	25.2
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				<0.04					
10/4/2017		0.009 (J)			<0.04	0.0077 (J)			
10/5/2017	<0.04						<0.04		
10/6/2017									
10/10/2017								0.0124 (J)	
10/11/2017			1.09						
10/12/2017									20
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018								0.013 (J)	
4/3/2018									
4/4/2018									22.7
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)			
6/12/2018			0.9				0.018 (J)		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018								0.012 (J)	
9/20/2018									20.3
9/24/2018									
9/25/2018	0.0046 (J)	0.007 (J)		0.0054 (J)	<0.04	0.0096 (J)			
9/26/2018							0.0055 (J)		
9/27/2018			0.71						
10/1/2018									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								0.013 (J)	20.3
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				0.011 (J)		0.0066 (J)			
4/3/2019	<0.04	0.0053 (J)			<0.04				
4/4/2019			0.6				<0.04		
6/12/2019									
9/24/2019				0.018 (J)					
9/25/2019					<0.04	0.0081 (J)			
9/26/2019	0.0062 (J)	0.0072 (J)					0.0068 (J)		
9/27/2019			0.58						
10/8/2019								0.012 (J)	
10/9/2019									16.6
3/17/2020								0.023 (J)	
3/18/2020									
3/19/2020									
3/24/2020	0.0054 (J)	0.01 (J)		0.016 (J)	<0.04	0.0092 (J)			
3/25/2020									15.5
3/26/2020			0.94				0.033 (J)		
9/22/2020								0.0076 (J)	
9/23/2020	0.021 (J)	0.006 (J)				0.0066 (J)	<0.04		
9/24/2020			1.1	0.013 (J)	0.0094 (J)				15.2
9/25/2020									
10/7/2020									
3/1/2021								0.013 (J)	
3/2/2021									
3/3/2021	<0.04	0.0094 (J)			<0.04	0.01 (J)	<0.04		
3/4/2021			1.2	0.0079 (J)					14.8

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	0.0315 (J)	0.169							
9/1/2016			0.0113 (J)						
9/2/2016				0.133					
9/13/2016									
9/14/2016					<0.04				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					<0.04				
11/8/2016									
11/14/2016				0.287					
11/15/2016			0.0074 (J)						
11/16/2016		0.406							
11/28/2016	0.0095 (J)								
12/15/2016					0.0107 (J)				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					<0.04				
1/17/2017									
2/21/2017									
2/22/2017	<0.04								
2/24/2017		0.725							
2/27/2017			<0.04						
2/28/2017				0.215					
3/1/2017									
3/2/2017									
3/3/2017					<0.04				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					<0.04				
5/1/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017	0.0084 (J)								
5/9/2017			<0.04	0.233					
5/10/2017		0.955							
5/26/2017					<0.04				
6/27/2017									
6/28/2017					<0.04				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017		0.994							
7/13/2017			0.0093 (J)	0.262					
7/17/2017	0.0092 (J)								
9/22/2017				0.238					
9/29/2017				0.235					
10/3/2017					<0.04				
10/4/2017									
10/5/2017									
10/6/2017				0.256					
10/10/2017									
10/11/2017			<0.04	0.245		0.0135 (J)			
10/12/2017		1.15					19.3	12	0.0401
10/16/2017	<0.04								
11/20/2017						0.0251 (J)	21.8		0.156
11/21/2017								12.1	
1/10/2018									0.15
1/11/2018						0.0255 (J)		12.8	
1/12/2018							18.7		
2/19/2018	<0.04							15.2	0.146
2/20/2018						<0.04	18.6		
4/2/2018									
4/3/2018						0.033 (J)	20.9	14.5	0.12
4/4/2018		1.2	0.0041 (J)						
6/5/2018									
6/6/2018									
6/7/2018					<0.04				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				0.25					
6/27/2018								14.1	
6/28/2018						0.053	22.7		0.16
8/6/2018	<0.04								
8/7/2018						0.024 (J)	19.1	11.9	0.12
9/19/2018									
9/20/2018		2.1	0.0042 (J)						
9/24/2018						0.028 (J)	18.4	12.2	0.099
9/25/2018									
9/26/2018				0.24					
9/27/2018									
10/1/2018					<0.04				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019	<0.04								
3/26/2019									0.096
3/27/2019						0.017 (J)	16.7		
3/28/2019		1.8	<0.04					7.1	
3/29/2019					0.0065 (J)				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				0.22					
6/12/2019	<0.04								
9/24/2019					0.0076 (J)				
9/25/2019									
9/26/2019			<0.04	0.13					
9/27/2019									
10/8/2019	<0.04								
10/9/2019		2.7				0.017 (J)	13.5	8.6	0.079
3/17/2020	0.0051 (J)								
3/18/2020									
3/19/2020					0.0073 (J)				
3/24/2020									0.088 (J)
3/25/2020		2.4	0.012 (J)	0.11		0.043 (J)	9.3	7.9	
3/26/2020									
9/22/2020	0.0079 (J)								
9/23/2020					<0.04				
9/24/2020			0.062 (J)			0.037 (J)			0.087 (J)
9/25/2020		3.9					8	6	
10/7/2020				0.018 (J)					
3/1/2021									
3/2/2021	<0.04								
3/3/2021					<0.04				
3/4/2021		3.6	<0.04	0.0088 (J)		0.033 (J)	6.4	4	0.078

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	21	12	2.5						
6/2/2016				33	1.3	28	1.3	2.4	8.8
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	20.3		2.16				1.17		
7/26/2016		11		32.3	1.24	24.5		2.12	7.69
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		11.8	2.21						
9/14/2016	19.7			31				2.18	8.49
9/15/2016					1.17	27			
9/16/2016									
9/19/2016							1.05		
9/20/2016									
11/1/2016	18.4	11				25.6	1.14		
11/2/2016				30.9	1.23				7.83
11/3/2016									
11/4/2016			2.67					2.17 (J)	
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017					1.24				
1/11/2017	20.3	11.2				27.5			
1/12/2017				35.7				2.37	
1/13/2017									8.08
1/16/2017			2.45				1.23		
1/17/2017									
2/21/2017							1.25		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	18.6								
3/2/2017		11	2.57			27.5			
3/3/2017									
3/6/2017									8.64
3/7/2017				32.7				2.34	
3/8/2017					1.21				
3/9/2017									
4/26/2017	25.6				1.14	30.4	1.03		
4/27/2017		11.1	2.38						
4/28/2017									
5/1/2017				37					13.4

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
5/2/2017								2.17	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		13.8	2.36	36.5				2.13	
6/28/2017	23.9					29.8			
6/29/2017									8.81
6/30/2017					1.24		1.13		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		14	2.21	30.9				2.15	
10/4/2017	22.1					29.7	1.09		
10/5/2017					1.11				9.29
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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						29.1		2.3	8.2
6/8/2018	21.9 (J)				1.1				
6/11/2018							1.1		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018				25.8				2.3	9.5 (J)
9/27/2018									
10/1/2018	19.7	15.1	1.8		0.99	26.9			

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
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				24.7 (J)				2.8	8.4
4/4/2019									
6/12/2019									
9/24/2019		15.8	2.3	25.8				2.5	
9/25/2019	22.4				1.1	29.5	1.1		9.5
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020			2.1		1.1				
3/19/2020	21.9	15				31.5	1.2		
3/24/2020				26.1				2.5	
3/25/2020									10.5
3/26/2020									
9/22/2020				27.2				2.6	9.6
9/23/2020	23.6	14.1	1.8			28.6			
9/24/2020							1.1		
9/25/2020					1.3				
10/7/2020									
3/1/2021							1.2		
3/2/2021				1.6	1.2			2.6	
3/3/2021	20.6	14.1	1.8			29.8			7.7
3/4/2021									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
6/1/2016									
6/2/2016									
6/6/2016	6.2	1.4							
6/7/2016			9.6	3.7	2.3	2.2			
6/8/2016							1.9		
7/25/2016									
7/26/2016									
7/27/2016	4.73	1.19			2.08	2			
7/28/2016			7.87	3.15					
8/1/2016							1.83		
8/30/2016								20.9	133
8/31/2016									
9/1/2016									
9/2/2016									
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				
9/20/2016			9.28				1.78		
11/1/2016									
11/2/2016					2.13				
11/3/2016	5.25	1.31		3.4		1.99			
11/4/2016									
11/8/2016			8.6				1.77		
11/14/2016								18.6	
11/15/2016									
11/16/2016									125
11/28/2016									
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			8.85						
1/17/2017							1.7		
2/21/2017									
2/22/2017									
2/24/2017								16.1	
2/27/2017									139
2/28/2017									
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							1.77		
3/9/2017			8.4						
4/26/2017	4.28	1.05		6.65	2.3				
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
5/2/2017			12.9			1.95	1.57		
5/8/2017								14.6	
5/9/2017									
5/10/2017									130
5/26/2017									
6/27/2017									
6/28/2017	4.95	1.06							
6/29/2017				6.04	2.54	2.02			
6/30/2017									
7/7/2017							1.8		
7/10/2017			8.09						
7/11/2017								14.3	172
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				8.28					
10/4/2017		1.1			2.25	2.03			
10/5/2017	5.28						1.7		
10/6/2017									
10/10/2017								12.1	
10/11/2017			6.36						
10/12/2017									144
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018								<25	
4/3/2018									
4/4/2018									137
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			
6/12/2018			4.7				1.8		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018								11.1 (J)	
9/20/2018									108
9/24/2018									
9/25/2018	4.6	1		10.4 (J)	2.3	2.1			
9/26/2018							1.7		
9/27/2018			4.1						
10/1/2018									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								10.8 (J)	109
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				8.8		2.5			
4/3/2019	5.3	1.2			2.9				
4/4/2019			3.7				1.9		
6/12/2019									
9/24/2019				7.7					
9/25/2019					2.4	2.6			
9/26/2019	4.9	1.1					1.7		
9/27/2019			3.7						
10/8/2019								9.7	
10/9/2019									92
3/17/2020								14.8	
3/18/2020									
3/19/2020									
3/24/2020	5.3	1		6	2.6	2.7			
3/25/2020									107
3/26/2020			5.6				1.7		
9/22/2020								10.1	
9/23/2020	5.2	0.91 (J)				2.6	2.4		
9/24/2020			7.9	7.8	2.6				84.3
9/25/2020									
10/7/2020									
3/1/2021								10.3	
3/2/2021									
3/3/2021	5.2	0.96 (J)			2.4	2.5	2.4		
3/4/2021			10.2	8.7					90.7

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	9.31	3.4							
9/1/2016			13.9						
9/2/2016				11.2					
9/13/2016									
9/14/2016					23.5				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					23.7				
11/8/2016									
11/14/2016				7.79					
11/15/2016			13.5						
11/16/2016		3.79							
11/28/2016	9.47 (B)								
12/15/2016					23.1				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					23.3				
1/17/2017									
2/21/2017									
2/22/2017	10.4								
2/24/2017		6.42							
2/27/2017			12.5						
2/28/2017				8.37					
3/1/2017									
3/2/2017									
3/3/2017					25.1				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					30.7				
5/1/2017									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017	14.2								
5/9/2017			14.4	13.9					
5/10/2017		7.9							
5/26/2017					26.2				
6/27/2017									
6/28/2017					26.1				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017		6.71							
7/13/2017			14.1	16.6					
7/17/2017	14.1								
9/22/2017				18.4					
9/29/2017				16.1					
10/3/2017					26.7				
10/4/2017									
10/5/2017									
10/6/2017				16.6					
10/10/2017									
10/11/2017			12.4	18.1		2.74			
10/12/2017		7.05					190	44.5	2.9
10/16/2017	13.6								
11/20/2017						1.81	184		10.4
11/21/2017								44.4	
1/10/2018									10.2
1/11/2018						1.54		43.9	
1/12/2018							178		
2/19/2018	<25							45.3	<25
2/20/2018						1.71	184		
4/2/2018									
4/3/2018						1.4	174	42.7	6.3
4/4/2018		8.6	<25						
6/5/2018									
6/6/2018									
6/7/2018					25				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				18.7 (J)					
6/27/2018								42.2	
6/28/2018						1.4	190		6.7
8/6/2018	11.4 (J)								
8/7/2018						1.2	176	40.7	6.3
9/19/2018									
9/20/2018		15.9 (J)	12 (J)						
9/24/2018						1.1	172	38.5	5.7
9/25/2018									
9/26/2018				19.8 (J)					
9/27/2018									
10/1/2018					25				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019	12.7 (J)								
3/26/2019									5.6
3/27/2019						1.5	155		
3/28/2019		8.9	11.3 (J)					26	
3/29/2019					23.5 (J)				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				16.9 (J)					
6/12/2019	18.9								
9/24/2019					26.4				
9/25/2019									
9/26/2019			12.1	11.7					
9/27/2019									
10/8/2019	28.3								
10/9/2019		18.2				2.4	133	27.6	4.9
3/17/2020	24.3								
3/18/2020									
3/19/2020					27.4				
3/24/2020									4.8
3/25/2020		12.1	13.2	10.6		2.7	124	29.6	
3/26/2020									
9/22/2020	31								
9/23/2020					26.3				
9/24/2020			12			3.7			4.4
9/25/2020		19.8					93.7	20.5	
10/7/2020				9.9					
3/1/2021									
3/2/2021	34.2								
3/3/2021					25.6				
3/4/2021		32.2	13	5.6		8.2	87	16.4	4.6

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	1.3	1.3	1.6						
6/2/2016				7.2	4.1	1.4	1.9	4.3	3.7
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	1.3		1.4				1.7		
7/26/2016		1.2		6.6	4	1.6		4.4	3.6
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		1.1	1.3						
9/14/2016	1.3			6.6				3.8	3.4
9/15/2016					4.2	1.5			
9/16/2016									
9/19/2016							1.6		
9/20/2016									
11/1/2016	1.4	1.3				1.7	1.8		
11/2/2016				7.6	4.9				4.5
11/3/2016									
11/4/2016			1.6					4.8	
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017					4.1				
1/11/2017	1.1	1.1				1.2			
1/12/2017				6.8				3.8	
1/13/2017									4.2
1/16/2017			1.4				1.7		
1/17/2017									
2/21/2017							1.7		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	1.1								
3/2/2017		1	1.3			1.2			
3/3/2017									
3/6/2017									3.6
3/7/2017				6.8				4.5	
3/8/2017					4.2				
3/9/2017									
4/26/2017	1.1				4.1	1.2	1.7		
4/27/2017		1	1.3						
4/28/2017									
5/1/2017				7.2					4.3

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
5/2/2017								4.6	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		1.1	1.4	7				4.3	
6/28/2017	1.2					1.3			
6/29/2017									4.2
6/30/2017					3.7		1.8		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		1.1	1.7	6.5				4.2	
10/4/2017	1.2					1.5	1.8		
10/5/2017					3.8				4.7
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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						1.2		4.5	4.4
6/8/2018	1.2				3.4				
6/11/2018							2		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018				4.8				5.1	4.8
9/27/2018									
10/1/2018	1.2	1.1	1.4		3.8	1.5			

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
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				4.2	4.3
4/4/2019									
6/12/2019									
9/24/2019		1.1	1.3	3.7				4.5	
9/25/2019	1.1				4.8	1.1	1.6		4.5
9/26/2019									
9/27/2019									
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				3.5				4.3	
3/25/2020									3.9
3/26/2020									
9/22/2020				3.6				4.2	4.5
9/23/2020	1	0.99 (J)	1.2			1.1			
9/24/2020							1.5		
9/25/2020					5.3				
10/7/2020									
3/1/2021							1.6		
3/2/2021				3.2	4.9			4.3	
3/3/2021	0.99 (J)	0.96 (J)	1.2			1.1			4.1
3/4/2021									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
6/1/2016									
6/2/2016									
6/6/2016	6.8	6.4							
6/7/2016			2.9	2.8	1.9	4.5			
6/8/2016							5.9		
7/25/2016									
7/26/2016									
7/27/2016	6.7	6.2			1.9	4.5			
7/28/2016			3.5	2.6					
8/1/2016							5.3		
8/30/2016								5.2	4.4
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		6.1				4.5			
9/19/2016	7			2.4	1.9				
9/20/2016			2.4				5.5		
11/1/2016									
11/2/2016					2.6				
11/3/2016	7.5	7.4		2.9		5.4			
11/4/2016									
11/8/2016			2.8				6.4		
11/14/2016								6.4	
11/15/2016									
11/16/2016									4.7
11/28/2016									
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			1.8						
1/17/2017							5.5		
2/21/2017									
2/22/2017									
2/24/2017								5.5	
2/27/2017									4.7
2/28/2017									
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							5.4		
3/9/2017			1.7						
4/26/2017	7	6.5		2.1	2				
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
5/2/2017			1.8			4.6	5.7		
5/8/2017								5.8	
5/9/2017									
5/10/2017									4.4
5/26/2017									
6/27/2017									
6/28/2017	7	6.4							
6/29/2017				2.8	2.6	4.5			
6/30/2017									
7/7/2017							5.7		
7/10/2017			1.9						
7/11/2017								5.8	4.7
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				2.2					
10/4/2017		6.8			2.6	4.7			
10/5/2017	7						6		
10/6/2017									
10/10/2017								5.9	
10/11/2017			2.4						
10/12/2017									4.3
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018								4.8	
4/3/2018									
4/4/2018									3.7
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			
6/12/2018			1.8				6.2		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018								4	
9/20/2018									3.8
9/24/2018									
9/25/2018	7.9	7.8		2.2	3.6	5.6			
9/26/2018							6.9		
9/27/2018			2						
10/1/2018									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								4.3	3.9
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				2.5		4.8			
4/3/2019	6.9	6.3			3.1				
4/4/2019			1.7				5.9		
6/12/2019									
9/24/2019				3.1					
9/25/2019					2.8	5.7			
9/26/2019	7	7.1					6.5		
9/27/2019			1.7						
10/8/2019								4.4	
10/9/2019									4.1
3/17/2020								4.1	
3/18/2020									
3/19/2020									
3/24/2020	7	6.8		2.8	2.7	5			
3/25/2020									3.2
3/26/2020			1.6				5.4		
9/22/2020								4.2	
9/23/2020	7.2	7.2				6.6	9.3		
9/24/2020			2	2	2.7				3.3
9/25/2020									
10/7/2020									
3/1/2021								3.7	
3/2/2021									
3/3/2021	7	7.2			2.7	7.1	8.6		
3/4/2021			1.8	1.8					2.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	4	1.5							
9/1/2016			5.3						
9/2/2016				6.3					
9/13/2016									
9/14/2016					1.1				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					1.4				
11/8/2016									
11/14/2016				6.7					
11/15/2016			5.8						
11/16/2016		1.7							
11/28/2016	4.2								
12/15/2016					2.9				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					0.98				
1/17/2017									
2/21/2017									
2/22/2017	3.7								
2/24/2017		1.5							
2/27/2017			4.6						
2/28/2017				5.4					
3/1/2017									
3/2/2017									
3/3/2017					1.1				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					0.91				
5/1/2017									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017	4.2								
5/9/2017			5.3	5.7					
5/10/2017		1.2							
5/26/2017					0.93				
6/27/2017									
6/28/2017					1				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017		1.5							
7/13/2017			4.7	5.4					
7/17/2017	3.8								
9/22/2017				6.9					
9/29/2017				5.5					
10/3/2017					1.2				
10/4/2017									
10/5/2017									
10/6/2017				5.5					
10/10/2017									
10/11/2017			5.8	6.4		2.4			
10/12/2017		1.6					6	3.1	3.8
10/16/2017	4.2								
11/20/2017						1.8	6.9		4.4
11/21/2017								4.2	
1/10/2018									4.6
1/11/2018						1.6		3.8	
1/12/2018							6.6		
2/19/2018	4.3							3.5	4.6
2/20/2018						2	6.2		
4/2/2018									
4/3/2018						3.3	6.9	4.4	5.9
4/4/2018		1.8	4.3						
6/5/2018									
6/6/2018									
6/7/2018					1				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				5.6					
6/27/2018								3.6	
6/28/2018						2.1	6.4		5
8/6/2018	3.8								
8/7/2018						1.2	5.5	3.3	4.3
9/19/2018									
9/20/2018		1.9	4.8						
9/24/2018						1.3	5.9	3.3	4.9
9/25/2018									
9/26/2018				6					
9/27/2018									
10/1/2018					1.1				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019	4.1								
3/26/2019									4.4
3/27/2019						1.4	6.2		
3/28/2019		1.8	4.4					3.2	
3/29/2019					1.2				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				5.4					
6/12/2019	4.7								
9/24/2019					0.95 (J)				
9/25/2019									
9/26/2019			5	7.1					
9/27/2019									
10/8/2019	5.1								
10/9/2019		2.3				2.1	5	3.3	5.1
3/17/2020	4.8								
3/18/2020									
3/19/2020					0.97 (J)				
3/24/2020									4.7
3/25/2020		1.8	4.1	6.3		1.9	4	2.7	
3/26/2020									
9/22/2020	4.2								
9/23/2020					0.88 (J)				
9/24/2020			4.6			2.7			5
9/25/2020		2.3					4	3	
10/7/2020				8.7					
3/1/2021									
3/2/2021	4.1								
3/3/2021					0.86 (J)				
3/4/2021		2.1	4.1	6.6		4.9	3.9	3.4	4.9

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)
6/1/2016	<0.1	0.12 (J)	0.15 (J)						
6/2/2016				<0.1	<0.1	<0.1	<0.1	0.62	0.11 (J)
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	0.06 (J)		0.14 (J)	0.06 (J)					
7/26/2016		0.08 (J)			<0.1	<0.1	0.02 (J)	0.49	0.05 (J)
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016	<0.1	0.11 (J)							
9/14/2016			0.18 (J)		<0.1	<0.1			0.04 (J)
9/15/2016							<0.1	0.54	
9/16/2016									
9/19/2016				<0.1					
9/20/2016									
11/1/2016		<0.1	<0.1	<0.1				0.68	
11/2/2016					<0.1		<0.1		<0.1
11/3/2016									
11/4/2016	<0.1					<0.1			
11/8/2016									
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					
1/17/2017									
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		
3/9/2017									
4/26/2017			0.08 (J)	<0.1			<0.1	0.48	
4/27/2017	0.01 (J)	0.04 (J)							
4/28/2017									
5/1/2017					<0.1				<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)
5/2/2017						<0.1			
5/8/2017									
5/9/2017									
5/10/2017									
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				
6/30/2017				<0.1			<0.1		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
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		
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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
3/30/2018									
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	<0.1		0.48	
6/8/2018			0.2 (J)				<0.1		
6/11/2018				<0.1					
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)
9/25/2018									
9/26/2018					<0.1	<0.1			<0.1
9/27/2018									
10/1/2018	<0.1	<0.1	<0.1				<0.1	0.44	
10/2/2018				<0.1					
2/25/2019									
2/26/2019				<0.1			<0.1		
2/27/2019	<0.1	0.052 (J)	0.13 (J)					0.53	
3/4/2019					<0.1	<0.1			0.19 (J)
3/5/2019									
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019	<0.1	0.036 (J)							
3/29/2019							<0.1		
4/1/2019			0.1 (J)	<0.1				0.45	
4/2/2019									
4/3/2019					<0.1	<0.1			0.047 (J)
4/4/2019									
6/12/2019									
8/19/2019									
8/20/2019									
8/21/2019									
8/22/2019									
9/24/2019	<0.1	0.063 (J)				<0.1			0.05 (J)
9/25/2019			0.1 (J)	<0.1	<0.1		<0.1	0.46	
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
2/10/2020	<0.1	0.061 (J)							
2/11/2020			0.094 (J)						
2/12/2020				<0.1	<0.1	<0.1	<0.1	0.4	<0.1
3/17/2020									
3/18/2020	<0.1						<0.1		
3/19/2020		0.064 (J)	0.11 (J)	<0.1				0.51	
3/24/2020						<0.1			<0.1
3/25/2020					<0.1				
3/26/2020									
8/26/2020									
8/27/2020									
9/22/2020					<0.1	<0.1			0.056 (J)
9/23/2020	<0.1	0.058 (J)	0.098 (J)					0.47	
9/24/2020				<0.1					
9/25/2020							<0.1		
10/7/2020									
2/8/2021						<0.1			0.055 (J)
2/9/2021					<0.1				
2/10/2021			<0.1				<0.1	0.43	
2/11/2021				<0.1					
2/12/2021	<0.1	0.068 (J)							
3/1/2021				<0.1					

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1I (bg)	YGWA-1D (bg)	YGWA-3I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-5D (bg)
3/2/2021						<0.1	<0.1		<0.1
3/3/2021	<0.1	0.078 (J)	0.1		<0.1			0.44	
3/4/2021									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
6/1/2016									
6/2/2016									
6/6/2016	<0.1	<0.1							
6/7/2016			<0.1	<0.1	<0.1	<0.1			
6/8/2016							<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)		0.03 (J)				
8/1/2016							<0.1		
8/30/2016								0.09 (J)	0.02 (J)
8/31/2016									
9/1/2016									
9/2/2016									
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					
9/20/2016					<0.1		<0.1		
11/1/2016									
11/2/2016				<0.1					
11/3/2016	<0.1	<0.1	<0.1			<0.1			
11/4/2016									
11/8/2016					<0.1		<0.1		
11/14/2016								0.18 (J)	
11/15/2016									
11/16/2016									0.07 (J)
11/28/2016									
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					<0.1				
1/17/2017							<0.1		
2/21/2017									
2/22/2017									
2/24/2017								0.05 (J)	
2/27/2017									0.06 (J)
2/28/2017									
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							<0.1		
3/9/2017					<0.1				
4/26/2017	<0.1	<0.1	0.04 (J)	<0.1					
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
5/2/2017					<0.1	<0.1	<0.1		
5/8/2017								0.03 (J)	
5/9/2017									
5/10/2017									<0.1
5/26/2017									
6/27/2017									
6/28/2017	<0.1	<0.1							
6/29/2017			<0.1	<0.1		<0.1			
6/30/2017									
7/7/2017							<0.1		
7/10/2017					<0.1				
7/11/2017								0.07 (J)	<0.1
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017			<0.1						
10/4/2017		<0.1		<0.1		<0.1			
10/5/2017	<0.1						<0.1		
10/6/2017									
10/10/2017								<0.1	
10/11/2017					<0.1				
10/12/2017									<0.1
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
3/27/2018									
3/28/2018	<0.1	<0.1				<0.1			
3/29/2018			<0.1	<0.1					
3/30/2018					<0.1		<0.1		
4/2/2018								<0.1	
4/3/2018									
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			
6/12/2018					<0.1		<0.1		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018								<0.1	
9/20/2018									0.041 (J)
9/24/2018									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
9/25/2018	<0.1	<0.1	0 (J)	<0.1		<0.1			
9/26/2018							<0.1		
9/27/2018					<0.1				
10/1/2018									
10/2/2018									
2/25/2019									
2/26/2019									
2/27/2019									
3/4/2019									
3/5/2019		<0.1	0.32	<0.1		<0.1	<0.1		
3/6/2019	<0.1				<0.1				
3/26/2019									
3/27/2019								0.081 (J)	<0.1
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			0.12 (J)			<0.1			
4/3/2019	<0.1	<0.1		<0.1					
4/4/2019					0.049 (J)		0.033 (J)		
6/12/2019									
8/19/2019									
8/20/2019								<0.1	
8/21/2019									
8/22/2019									<0.1
9/24/2019			0.15 (J)						
9/25/2019				<0.1		<0.1			
9/26/2019	<0.1	<0.1					0.098 (J)		
9/27/2019					0.12 (J)				
10/8/2019								0.034 (J)	
10/9/2019									<0.1
2/10/2020									
2/11/2020	<0.1	<0.1				<0.1			
2/12/2020			0.1 (J)	<0.1					
3/17/2020								<0.1	
3/18/2020									
3/19/2020									
3/24/2020	<0.1	<0.1	0.081 (J)	<0.1		<0.1			
3/25/2020									<0.1
3/26/2020					<0.1		<0.1		
8/26/2020									
8/27/2020								<0.1	
9/22/2020								<0.1	
9/23/2020	<0.1	<0.1				<0.1	<0.1		
9/24/2020			0.079 (J)	<0.1	<0.1				<0.1
9/25/2020									
10/7/2020									
2/8/2021									
2/9/2021	<0.1	<0.1	0.092 (J)	<0.1	<0.1		<0.1		
2/10/2021									<0.1
2/11/2021									
2/12/2021									
3/1/2021								<0.1	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-21I (bg)	YGWA-20S (bg)	YGWC-23S	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
3/2/2021									
3/3/2021	<0.1	<0.1		<0.1		<0.1	<0.1		
3/4/2021			0.091 (J)		<0.1				<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-41	YGWC-38
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	0.12 (J)	0.14 (J)							
9/1/2016			0.09 (J)						
9/2/2016				0.05 (J)					
9/13/2016									
9/14/2016					0.08 (J)				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					<0.1				
11/8/2016									
11/14/2016				0.18 (J)					
11/15/2016			0.16 (J)						
11/16/2016	0.2 (J)								
11/28/2016		0.12 (J)							
12/15/2016					0.06 (J)				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					0.1 (J)				
1/17/2017									
2/21/2017									
2/22/2017		0.09 (J)							
2/24/2017	0.21 (J)								
2/27/2017			0.06 (J)						
2/28/2017				0.09 (J)					
3/1/2017									
3/2/2017									
3/3/2017					<0.1				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					0.06 (J)				
5/1/2017									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-41	YGWC-38
5/2/2017									
5/8/2017		0.05 (J)							
5/9/2017			0.05 (J)	0.009 (J)					
5/10/2017	0.04 (J)								
5/26/2017					0.09 (J)				
6/27/2017									
6/28/2017					0.11 (J)				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	0.2 (J)								
7/13/2017			<0.1	<0.1					
7/17/2017		0.14 (J)							
9/22/2017				0.09 (J)					
9/29/2017				<0.1					
10/3/2017					<0.1				
10/4/2017									
10/5/2017									
10/6/2017				<0.1					
10/10/2017									
10/11/2017			0.14 (J)	<0.1		<0.1			
10/12/2017	0.1 (J)						<0.1	<0.1	<0.1
10/16/2017		0.12 (J)							
11/20/2017						<0.1	<0.1		0.2 (J)
11/21/2017								<0.1	
1/10/2018							<0.1		
1/11/2018						<0.1		<0.1	
1/12/2018									0.21 (J)
2/19/2018		0.17					<0.1	<0.1	
2/20/2018						0.23			<0.1
3/27/2018									
3/28/2018					0.31				
3/29/2018									
3/30/2018				<0.1					
4/2/2018									
4/3/2018						<0.1	<0.1	<0.1	0.41
4/4/2018	<0.1		<0.1						
6/5/2018									
6/6/2018									
6/7/2018					0.11 (J)				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				<0.1					
6/27/2018								<0.1	
6/28/2018						<0.1	<0.1		0.43
8/6/2018		0.087 (J)							
8/7/2018						0.048 (J)	<0.1	0.11 (J)	<0.1
9/19/2018									
9/20/2018	<0.1		<0.1						
9/24/2018						<0.1	<0.1	<0.1	0.034 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-41	YGWC-38
9/25/2018									
9/26/2018				<0.1					
9/27/2018									
10/1/2018					<0.1				
10/2/2018									
2/25/2019		0.14 (J)							
2/26/2019									
2/27/2019					0.12 (J)				
3/4/2019									
3/5/2019									
3/6/2019				<0.1					
3/26/2019							<0.1		
3/27/2019						<0.1			0.24 (J)
3/28/2019	0.078 (J)		<0.1					0.1 (J)	
3/29/2019					0.13 (J)				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				0.043 (J)					
6/12/2019		0.12 (J)							
8/19/2019		<0.1							
8/20/2019									
8/21/2019	0.062 (J)					<0.1	<0.1		
8/22/2019								<0.1	<0.1
9/24/2019					0.081 (J)				
9/25/2019									
9/26/2019			0.09 (J)	0.094 (J)					
9/27/2019									
10/8/2019		0.052 (J)							
10/9/2019	<0.1					<0.1	<0.1	<0.1	<0.1
2/10/2020									
2/11/2020					0.075 (J)				
2/12/2020						<0.1	<0.1		
3/17/2020		0.053 (J)							
3/18/2020									
3/19/2020					0.093 (J)				
3/24/2020							<0.1		
3/25/2020	0.073 (J)		<0.1	<0.1		<0.1		<0.1	<0.1
3/26/2020									
8/26/2020		0.068 (J)							
8/27/2020									
9/22/2020		0.058 (J)							
9/23/2020					0.08 (J)				
9/24/2020			<0.1			<0.1	<0.1		
9/25/2020	<0.1							<0.1	<0.1
10/7/2020				<0.1					
2/8/2021									
2/9/2021	0.058 (J)		<0.1						<0.1
2/10/2021				<0.1	0.094 (J)	<0.1	<0.1	<0.1	
2/11/2021									
2/12/2021									
3/1/2021									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-41	YGWC-38
3/2/2021		0.073 (J)							
3/3/2021					0.085 (J)				
3/4/2021	0.063 (J)		<0.1	<0.1		<0.1	<0.1	<0.1	<0.1

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-5I (bg)
8/27/2008	6.53								
3/3/2009	6.35								
11/18/2009	6.47								
3/3/2010	6.53								
3/10/2011	5.83								
9/8/2011	5.69								
3/5/2012	6.27								
9/10/2012	6.23								
2/6/2013	7.56								
8/12/2013	6.68								
2/5/2014	6.32								
8/3/2015	6.13 (D)								
2/16/2016	5.64								
6/1/2016		7.72	7.46	6.33					
6/2/2016					5.75	6.36	7.67	7.84	5.75
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016		7.74		6.21	5.82				
7/26/2016			7.43			6.22	7.66	7.88	5.72
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016			7.44	6.16					
9/14/2016		7.65				6.23	7.6		5.74
9/15/2016								7.74	
9/16/2016									
9/19/2016					5.78 (D)				
9/20/2016									
11/1/2016		7.7	7.24		5.62			7.75	
11/2/2016						6.08	7.35		
11/3/2016									
11/4/2016				6.29					5.61
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016	6.23								
12/15/2016									
1/10/2017									
1/11/2017		7.53	7.3					7.66	
1/12/2017							7.49		5.71
1/13/2017						6.19			
1/16/2017				6.29	5.72				
1/17/2017									
2/21/2017					5.67				
2/22/2017	6.21								
2/24/2017									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-5I (bg)
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			
3/7/2017							7.43		5.66
3/8/2017									
3/9/2017									
4/26/2017		7.4			5.56			7.45	
4/27/2017			6.99	6.09					
4/28/2017									
5/1/2017						6.21	7.22		
5/2/2017									5.65
5/8/2017	6.12								
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017			6.87	6.21			7.32		5.7
6/28/2017		7.5						7.65	
6/29/2017						6.21			
6/30/2017					5.72				
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017	6.03								
9/22/2017									
9/29/2017									
10/3/2017			6.81	5.98			7.48		5.79
10/4/2017		7.45			5.87			7.49	
10/5/2017						6.16			
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017	6.12								
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018	6.13								
2/20/2018									
3/27/2018				6.25	5.83				
3/28/2018		7.74						7.91	
3/29/2018			7.38			6.09	7.02		5.63
3/30/2018									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			7.16						

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-5I (bg)
6/6/2018				6.17			7.43		
6/7/2018						6.12		7.69	5.63
6/8/2018		7.64							
6/11/2018					5.69				
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018	6.01								
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018						5.84	7.13		5.63
9/27/2018									
10/1/2018		7.47	6.8	5.9				7.39	
10/2/2018					5.39				
2/25/2019	6.51								
2/26/2019					5.77				
2/27/2019		7.54	6.84	5.8				7.55	
3/4/2019						6.18	7.46		5.75
3/5/2019									
3/6/2019									
3/26/2019									
3/27/2019									
3/28/2019			6.99	6.15					
3/29/2019									
4/1/2019		7.74			5.62			7.87	
4/2/2019									
4/3/2019						6.43	7.11		5.63
4/4/2019									
6/12/2019	6.3								
8/19/2019	6.23								
8/20/2019									
8/21/2019									
8/22/2019									
9/24/2019			7.07	6.23			6.93		5.6
9/25/2019		7.47			5.69	6.2		7.64	
9/26/2019									
9/27/2019									
10/8/2019	6.28								
10/9/2019									
2/10/2020			7.2	6.1					
2/11/2020		7.09							
2/12/2020					5.8	6.15	7.52	7.83	5.83
3/17/2020	6.14								
3/18/2020				6.19					
3/19/2020		7.31	7.03		6			7.65	
3/24/2020							7.34		5.81
3/25/2020						6.26			
3/26/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-30I (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-3D (bg)	YGWA-5I (bg)
5/6/2020	6.24								
8/26/2020	5.67								
8/27/2020									
9/22/2020	5.78					5.8 (D)	7.19 (D)		5.99 (D)
9/23/2020		7.37	7.15	6.01				7.57	
9/24/2020					5.67				
9/25/2020									
10/7/2020									
2/8/2021									5.67
2/9/2021						6.06			
2/10/2021		7.58						7.81	
2/11/2021					5.73				
2/12/2021			7.14	6.21					
3/1/2021					5.78				
3/2/2021	5.42						7.15		5.63
3/3/2021		8.23	7.2	5.38		6.21		8.39	
3/4/2021									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
8/27/2008									
3/3/2009									
11/18/2009									
3/3/2010									
3/10/2011									
9/8/2011									
3/5/2012									
9/10/2012									
2/6/2013									
8/12/2013									
2/5/2014									
8/3/2015									
2/16/2016									
6/1/2016									
6/2/2016	5.46								
6/6/2016		5.71	6.17						
6/7/2016				5.77	6.1	5.62	5.57		
6/8/2016								5.65	
7/25/2016									
7/26/2016	5.45								
7/27/2016		5.46	6.14	5.79		5.59			
7/28/2016					6.12		5.6		
8/1/2016								5.47	
8/30/2016									5.75
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016									
9/14/2016									
9/15/2016	5.45								
9/16/2016						5.58			
9/19/2016		5.59	6.04	5.73	6.12				
9/20/2016							5.53	5.61	
11/1/2016									
11/2/2016	5.41			5.67					
11/3/2016		5.39	5.97		6.07	5.59			
11/4/2016									
11/8/2016							5.53	5.55	
11/14/2016									5.59
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017	5.37								
1/11/2017		5.48	6.05			5.59			
1/12/2017									
1/13/2017				5.79	6.41				
1/16/2017							5.59		
1/17/2017								5.53	
2/21/2017									
2/22/2017									
2/24/2017									5.49

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
2/27/2017									
2/28/2017									
3/1/2017		5.41	5.94						
3/2/2017						5.54			
3/3/2017									
3/6/2017				5.63	6.34				
3/7/2017									
3/8/2017	5.41							5.62	
3/9/2017							5.56		
4/26/2017	5.02	5.4	5.99	5.66	6.32				
4/27/2017									
4/28/2017									
5/1/2017									
5/2/2017						5.47	5.61	5.46	
5/8/2017									5.58
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017									
6/28/2017		5.36	6						
6/29/2017				5.85	6.47	5.56			
6/30/2017	5.39								
7/7/2017								5.81	
7/10/2017							5.68		
7/11/2017									5.58
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017					6.56				
10/4/2017		5.32		5.83		5.57			
10/5/2017	5.49		6.11					5.45	
10/6/2017									
10/10/2017									5.49
10/11/2017							5.46		
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
3/27/2018	5.47								
3/28/2018		5.34	6.1			5.59			
3/29/2018				5.93	6.75				
3/30/2018							5.73	5.64	
4/2/2018									6.3 (O)
4/3/2018									
4/4/2018									
6/5/2018					6.09				

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
6/6/2018				5.86					
6/7/2018			5.98						
6/8/2018	5.45								
6/11/2018		5.28				5.58			
6/12/2018							5.63	5.64	
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									5.48
9/20/2018									
9/24/2018									
9/25/2018		4.86	5.81	5.84	6.67	5.59			
9/26/2018								5.61	
9/27/2018							5.47		
10/1/2018	5.39								
10/2/2018									
2/25/2019									
2/26/2019	5.46								
2/27/2019									
3/4/2019									
3/5/2019		5.26		6.07	7.22	5.48		5.72	
3/6/2019			5.99				5.84		
3/26/2019									
3/27/2019									5.83
3/28/2019									
3/29/2019	5.34								
4/1/2019									
4/2/2019					6.94	5.74			
4/3/2019		5.47	6.29	5.71					
4/4/2019							5.64	5.66	
6/12/2019									
8/19/2019									
8/20/2019									5.58
8/21/2019									
8/22/2019									
9/24/2019					6.87				
9/25/2019	5.19			5.86		5.49			
9/26/2019		5.2	6.04					5.52	
9/27/2019							5.77		
10/8/2019									5.59
10/9/2019									
2/10/2020									
2/11/2020		5.3	6.07			5.58			
2/12/2020	5.48			6	7.13				
3/17/2020									5.57
3/18/2020	5.38								
3/19/2020									
3/24/2020		5.33	5.98	5.86	6.35	5.57			
3/25/2020									
3/26/2020							5.69	5.51	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-14S (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
5/6/2020									
8/26/2020									
8/27/2020									4.88
9/22/2020									5.46
9/23/2020		5.29 (D)	6.01 (D)			5.58 (D)		5.64	
9/24/2020				5.8 (D)	6.7 (D)		5.51		
9/25/2020	5.44								
10/7/2020									
2/8/2021									
2/9/2021		5.43	6.12	5.86	6.95		5.61	5.69	
2/10/2021	5.35								
2/11/2021									
2/12/2021									
3/1/2021									5.48
3/2/2021	5.49								
3/3/2021		5.31	5.89	5.89		5.52		5.7	
3/4/2021					6.8		5.44		

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
8/27/2008									
3/3/2009									
11/18/2009									
3/3/2010									
3/10/2011									
9/8/2011									
3/5/2012									
9/10/2012									
2/6/2013									
8/12/2013									
2/5/2014									
8/3/2015									
2/16/2016									
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016	5.64								
8/31/2016		7.27							
9/1/2016			5.78						
9/2/2016				5.84					
9/13/2016					7.41				
9/14/2016									
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					7.12				
11/8/2016									
11/14/2016				6.28					
11/15/2016			5.81						
11/16/2016	6.21	6.79							
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				
1/17/2017									
2/21/2017									
2/22/2017									
2/24/2017		6.39							

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
2/27/2017	6.09		5.68						
2/28/2017				5.99					
3/1/2017									
3/2/2017									
3/3/2017					7.22				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					7.21				
5/1/2017									
5/2/2017									
5/8/2017									
5/9/2017			6.18	6.3					
5/10/2017	5.79	6.5							
5/26/2017					7.13				
6/27/2017									
6/28/2017					7.06				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	5.45	6.32							
7/13/2017			5.6	5.57					
7/17/2017									
9/22/2017				5.5					
9/29/2017				5.58					
10/3/2017					6.99				
10/4/2017									
10/5/2017									
10/6/2017				5.51					
10/10/2017									
10/11/2017			5.61	5.47		6.4			
10/12/2017	5.48	5.97					4.94	4.85	5.43
10/16/2017									
11/20/2017						6.33		4.87	5.1
11/21/2017							4.69		
1/10/2018									4.97
1/11/2018						6.29	4.73		
1/12/2018								4.78	
2/19/2018							4.96		5.6
2/20/2018						7.22		5.1	
3/27/2018									
3/28/2018					7.3				
3/29/2018									
3/30/2018				5.51					
4/2/2018									
4/3/2018						6.87	5.31	4.76	5.84
4/4/2018	5.93	6.41	5.98						
6/5/2018									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
6/6/2018									
6/7/2018					7.29				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				5.5					
6/27/2018							4.78		
6/28/2018						6.18		4.75	5.24
8/6/2018									
8/7/2018						6.08	4.77	4.72	5.18
9/19/2018									
9/20/2018	5.63	5.69	5.67						
9/24/2018						5.81	4.78	4.67	5.14
9/25/2018									
9/26/2018				5.53					
9/27/2018									
10/1/2018					7.07				
10/2/2018									
2/25/2019									
2/26/2019									
2/27/2019					7.27				
3/4/2019									
3/5/2019									
3/6/2019				5.21					
3/26/2019									5.3
3/27/2019	5.57					5.84		4.79	
3/28/2019		5.96	5.86				5		
3/29/2019					7.06				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				5.74					
6/12/2019									
8/19/2019									
8/20/2019									
8/21/2019		5.84				5.96			5.26
8/22/2019	5.61						4.89	4.81	
9/24/2019					7.01				
9/25/2019									
9/26/2019			5.6	5.51					
9/27/2019									
10/8/2019									
10/9/2019	5.5	5.78				5.81	4.86	4.8	5.22
2/10/2020									
2/11/2020					7.38				
2/12/2020						5.97			5.3
3/17/2020									
3/18/2020									
3/19/2020					7.22				
3/24/2020									5.29
3/25/2020	5.53	5.79	5.69	5.49		5.78	4.87	4.89	
3/26/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
5/6/2020									
8/26/2020									
8/27/2020									
9/22/2020									
9/23/2020					7.22				
9/24/2020	5.55		5.62			5.7 (D)			5.43 (D)
9/25/2020		5.75					4.95	4.9	
10/7/2020				5.86					
2/8/2021									
2/9/2021		5.86	5.79					5.04	
2/10/2021	5.65			6.31	7.29	5.8	4.98		5.19
2/11/2021									
2/12/2021									
3/1/2021									
3/2/2021									
3/3/2021					7.92				
3/4/2021	5.59	5.88	5.88	5.67		5.54	4.69	5.01	5.23

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	12	5	4.2						
6/2/2016				20	6.6	5.8	1.3	1.9	8
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	8.4		3.7				1.2		
7/26/2016		5.4		20	6.1	6.7		1.8	7.7
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		2.9	5.2						
9/14/2016	8.6			19				1.8	7.5
9/15/2016					6.1	6			
9/16/2016									
9/19/2016							1.2		
9/20/2016									
11/1/2016	8.9	3.9				4.9	1.3		
11/2/2016				20	6.3				8.2
11/3/2016									
11/4/2016			5					2	
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017					5.9				
1/11/2017	8.6	3.7				4.5			
1/12/2017				19				1.9	
1/13/2017									8.1
1/16/2017			7.9				<1		
1/17/2017									
2/21/2017							1.4		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	9.3								
3/2/2017		4.6	7.4			4.4			
3/3/2017									
3/6/2017									8
3/7/2017				20				2.1	
3/8/2017					7				
3/9/2017									
4/26/2017	11				7	5.1	1.4		
4/27/2017		5.2	7.4						
4/28/2017									
5/1/2017				20					8.4

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
5/2/2017								2	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		5.9	6.4	18				2.1	
6/28/2017	12					5.4			
6/29/2017									9.2
6/30/2017					6.5		<1		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		6.6	5.9	16				2.3	
10/4/2017	12					6.2	1.4		
10/5/2017					7.9				9.6
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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						6.7		2	8.5
6/8/2018	9.6				6.4				
6/11/2018							1.1		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018				7.9				2.3	10.2
9/27/2018									
10/1/2018	9.1	5.6	4		6.8	7.1			

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
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				7				2.1	8.5
4/4/2019									
6/12/2019									
9/24/2019		5.3	4.3	5.5				2.4	
9/25/2019	13.8				6.6	7	0.81 (J)		8.5
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020			5.3		8.1				
3/19/2020	12.9	10				9	1.6		
3/24/2020				5.9				2.1	
3/25/2020									8.8
3/26/2020									
9/22/2020				5.5				2.1	8.2
9/23/2020	16.8	8.1	3.4			6.9			
9/24/2020							0.69 (J)		
9/25/2020					6.1				
10/7/2020									
3/1/2021							0.88 (J)		
3/2/2021				2.6	6			2.3	
3/3/2021	9.6	9	4.4			7			7.8
3/4/2021									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
6/1/2016									
6/2/2016									
6/6/2016	1.2	1.8							
6/7/2016			56	5.2	<1	4.4			
6/8/2016							<1		
7/25/2016									
7/26/2016									
7/27/2016	1.7	1.9			0.08 (J)	4.7			
7/28/2016			57	5.1					
8/1/2016							1.1		
8/30/2016								160	980
8/31/2016									
9/1/2016									
9/2/2016									
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)				
9/20/2016			68				0.38 (J)		
11/1/2016									
11/2/2016					0.1 (J)				
11/3/2016	0.69 (J)	1.9		5		5.3			
11/4/2016									
11/8/2016			79				0.39 (J)		
11/14/2016								150	
11/15/2016									
11/16/2016									940
11/28/2016									
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			72						
1/17/2017							<1		
2/21/2017									
2/22/2017									
2/24/2017								120	
2/27/2017									940
2/28/2017									
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							0.29 (J)		
3/9/2017			69						
4/26/2017	1.6	1.9		4.9	<1				
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
5/2/2017			60			5	0.29 (J)		
5/8/2017								120	
5/9/2017									
5/10/2017									1200
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							
6/29/2017				5.5	<1	5.2			
6/30/2017									
7/7/2017							0.37 (J)		
7/10/2017			57						
7/11/2017								110	1300
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				5.8					
10/4/2017		1.7			<1	5.3			
10/5/2017	1.6						<1		
10/6/2017									
10/10/2017								93	
10/11/2017			52						
10/12/2017									1100
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018								88.8	
4/3/2018									
4/4/2018									1020
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			
6/12/2018			41.4				0.35 (J)		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018								75	
9/20/2018									810
9/24/2018									
9/25/2018	1	1.5		7	0.13 (J)	6.1			
9/26/2018							0.28 (J)		
9/27/2018			39.6						
10/1/2018									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								65.9	831
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				3.8		5.1			
4/3/2019	0.82 (J)	1.3			0.12 (J)				
4/4/2019			27.9				0.29 (J)		
6/12/2019									
9/24/2019				1					
9/25/2019					<1	5.5			
9/26/2019	0.64 (J)	1					0.23 (J)		
9/27/2019			30.3						
10/8/2019								52.3	
10/9/2019									725
3/17/2020								71.6	
3/18/2020									
3/19/2020									
3/24/2020	<1	0.99 (J)		3	<1	5.4			
3/25/2020									642
3/26/2020			36.5				<1		
9/22/2020								51.5	
9/23/2020	0.53 (J)	1.1				5.1	<1		
9/24/2020			52.5	3.6	<1				579
9/25/2020									
10/7/2020									
3/1/2021								51.6	
3/2/2021									
3/3/2021	<1	1			<1	5.2	<1		
3/4/2021			61.7 (M1)	4.5					537

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	29	34							
9/1/2016			95						
9/2/2016				72					
9/13/2016									
9/14/2016					9.4				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					13				
11/8/2016									
11/14/2016				110					
11/15/2016			94						
11/16/2016		240							
11/28/2016	36								
12/15/2016					1.8				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					11				
1/17/2017									
2/21/2017									
2/22/2017	43								
2/24/2017		89							
2/27/2017			84						
2/28/2017				110					
3/1/2017									
3/2/2017									
3/3/2017					8.8				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					10				
5/1/2017									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017	60								
5/9/2017			91	130					
5/10/2017		100							
5/26/2017					12				
6/27/2017									
6/28/2017					11				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017		110							
7/13/2017			88	140					
7/17/2017	63								
9/22/2017				160					
9/29/2017				160					
10/3/2017					7.9				
10/4/2017									
10/5/2017									
10/6/2017				160					
10/10/2017									
10/11/2017			86	150		20			
10/12/2017		120					940	400	17
10/16/2017	62								
11/20/2017						24	980		71
11/21/2017								430	
1/10/2018									66
1/11/2018						23		390	
1/12/2018							880		
2/19/2018	64.6							414	57.2
2/20/2018						20.6	905		
4/2/2018									
4/3/2018						24.5	872	406	49.4
4/4/2018		160	76.5						
6/5/2018									
6/6/2018									
6/7/2018					8.8				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				144					
6/27/2018								357	
6/28/2018						22	869		43.8
8/6/2018	42.1								
8/7/2018						20.7	879	346	40.5
9/19/2018									
9/20/2018		247	84.1						
9/24/2018						21.2	872	358	39.7
9/25/2018									
9/26/2018				160					
9/27/2018									
10/1/2018					9.1				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019	42.1								
3/26/2019									34.3
3/27/2019						17.7	851		
3/28/2019		181	82.8					258	
3/29/2019					9				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				119					
6/12/2019	83.4								
9/24/2019					9.1				
9/25/2019									
9/26/2019			80	84.8					
9/27/2019									
10/8/2019	128								
10/9/2019		279				15	708	263	27.9
3/17/2020	98.6								
3/18/2020									
3/19/2020					12.4				
3/24/2020									25.2
3/25/2020		164	76.1	58.8		14.3	483	214	
3/26/2020									
9/22/2020	145								
9/23/2020					11.8				
9/24/2020			77			11.7			22.9
9/25/2020		281					414	175	
10/7/2020				18.2					
3/1/2021									
3/2/2021	156								
3/3/2021					10.6				
3/4/2021		328	75.1	6.3		12	356	117	21.5

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
6/1/2016	150	120	54						
6/2/2016				160	46	130	36	66	96
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	135		48				50		
7/26/2016		94		177	54	141		78	92
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		105	67						
9/14/2016	127			187				73	102
9/15/2016					54	153			
9/16/2016									
9/19/2016							35		
9/20/2016									
11/1/2016	75	44				92	<25		
11/2/2016				181	71				115
11/3/2016									
11/4/2016			60					75	
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017					45				
1/11/2017	148	107				159			
1/12/2017				202				86	
1/13/2017									67
1/16/2017			65				47		
1/17/2017									
2/21/2017							<25		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	182								
3/2/2017		98	61			117			
3/3/2017									
3/6/2017									159
3/7/2017				257				108	
3/8/2017					178				
3/9/2017									
4/26/2017	92				52	181	55		
4/27/2017		116	31						
4/28/2017									
5/1/2017				165					107

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
5/2/2017								103	
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		89	42	189				73	
6/28/2017	126					169			
6/29/2017									79
6/30/2017					45		42		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		119	58	170				89	
10/4/2017	147					141	31		
10/5/2017					40				95
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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						95		142	90
6/8/2018	158				114				
6/11/2018							59		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018				144				86	116
9/27/2018									
10/1/2018	138	117	60		50	165			

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-5D (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-30I (bg)	YGWA-5I (bg)	YGWA-4I (bg)
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				142				83	111
4/4/2019									
6/12/2019									
9/24/2019		124	54	129				79	
9/25/2019	159				64	157	51		117
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020			35		57				
3/19/2020	148	116				146	47		
3/24/2020				139				68	
3/25/2020									146
3/26/2020									
9/22/2020				104				75	83
9/23/2020	155	108	15			157			
9/24/2020							51		
9/25/2020					54				
10/7/2020									
3/1/2021							23		
3/2/2021				52	67			67	
3/3/2021	111	99	39			137			80
3/4/2021									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
6/1/2016									
6/2/2016									
6/6/2016	120	58							
6/7/2016			130	60	38	28			
6/8/2016							66		
7/25/2016									
7/26/2016									
7/27/2016	94	35			74	74			
7/28/2016			119	81					
8/1/2016							56		
8/30/2016								319	1650
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016		35				67			
9/19/2016	92			68	45				
9/20/2016			132				53		
11/1/2016									
11/2/2016					53				
11/3/2016	104	48		61		41			
11/4/2016									
11/8/2016			146				58		
11/14/2016								280	
11/15/2016									
11/16/2016									1420
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017	133	95				104			
1/12/2017									
1/13/2017				76	46				
1/16/2017			194						
1/17/2017							56		
2/21/2017									
2/22/2017									
2/24/2017								162	
2/27/2017									1640
2/28/2017									
3/1/2017	119	79							
3/2/2017						77			
3/3/2017									
3/6/2017				167	164				
3/7/2017									
3/8/2017							192		
3/9/2017			288						
4/26/2017	162	36		50	34				
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
5/2/2017			221			142	113		
5/8/2017								194	
5/9/2017									
5/10/2017									1630
5/26/2017									
6/27/2017									
6/28/2017	98	45							
6/29/2017				94	68	53			
6/30/2017									
7/7/2017							46		
7/10/2017			123						
7/11/2017								193	1800
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				149					
10/4/2017		45			54	61			
10/5/2017	104						48		
10/6/2017									
10/10/2017								175	
10/11/2017			100						
10/12/2017									1600
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018								192	
4/3/2018									
4/4/2018									1520
6/5/2018				109					
6/6/2018					79				
6/7/2018	68								
6/8/2018									
6/11/2018		74				70			
6/12/2018			115				79		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018								186	
9/20/2018									1240
9/24/2018									
9/25/2018	109	63		122	73	86			
9/26/2018							59		
9/27/2018			105						
10/1/2018									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18I (bg)	YGWA-18S (bg)	YGWC-23S	YGWA-21I (bg)	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWA-47 (bg)	YGWC-42
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								170	1100
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				134		72			
4/3/2019	89	63			57				
4/4/2019			85				63		
6/12/2019									
9/24/2019				157					
9/25/2019					75	81			
9/26/2019	126	72					81		
9/27/2019			96						
10/8/2019								172	
10/9/2019									1170
3/17/2020								165	
3/18/2020									
3/19/2020									
3/24/2020	91	59		117	76	71			
3/25/2020									1200
3/26/2020			110				67		
9/22/2020								141	
9/23/2020	103	81				99	87		
9/24/2020			129	113	69				1060
9/25/2020									
10/7/2020									
3/1/2021								145	
3/2/2021									
3/3/2021	95	37			53	57	70		
3/4/2021			96	110					501

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	209	80							
9/1/2016			228						
9/2/2016				243					
9/13/2016									
9/14/2016					152				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					148				
11/8/2016									
11/14/2016				272					
11/15/2016			211						
11/16/2016		112							
11/28/2016	102								
12/15/2016					191				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					180				
1/17/2017									
2/21/2017									
2/22/2017	164								
2/24/2017		147							
2/27/2017			382						
2/28/2017				306					
3/1/2017									
3/2/2017									
3/3/2017					156				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					130				
5/1/2017									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017	145								
5/9/2017			154	303					
5/10/2017		203							
5/26/2017					223				
6/27/2017									
6/28/2017					166				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017		238							
7/13/2017			192	282					
7/17/2017	185								
9/22/2017				309					
9/29/2017				273					
10/3/2017					153				
10/4/2017									
10/5/2017									
10/6/2017				287					
10/10/2017									
10/11/2017			177	264		68			
10/12/2017		287					1360	636	74
10/16/2017	218								
11/20/2017						139	1390		179
11/21/2017								706	
1/10/2018									140
1/11/2018						153		701	
1/12/2018							1400		
2/19/2018	173							630	119
2/20/2018						87	1300		
4/2/2018									
4/3/2018						85	1390	660	106
4/4/2018		292	174						
6/5/2018									
6/6/2018									
6/7/2018					146				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				292					
6/27/2018								575	
6/28/2018						88	1310		112
8/6/2018	158								
8/7/2018						89	1340	574	103
9/19/2018									
9/20/2018		434	186						
9/24/2018						82	1400	588	107
9/25/2018									
9/26/2018				277					
9/27/2018									
10/1/2018					155				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 5/6/2021 8:46 PM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019	92								
3/26/2019									90
3/27/2019						75	1190		
3/28/2019		323	164					372	
3/29/2019					150				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				240					
6/12/2019	226								
9/24/2019					146				
9/25/2019									
9/26/2019			192	198					
9/27/2019									
10/8/2019	276								
10/9/2019		501				119	1100	440	98
3/17/2020	185								
3/18/2020									
3/19/2020					148				
3/24/2020									84
3/25/2020		352	130	164		158	883	428	
3/26/2020									
9/22/2020	281								
9/23/2020					161				
9/24/2020			187			170			77
9/25/2020		494					664	307	
10/7/2020				137					
3/1/2021									
3/2/2021	296								
3/3/2021					138				
3/4/2021		592	145	69		168	600	224	57

FIGURE E.

Appendix III Trend Tests - Prediction Limits Exceedances - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-21I (bg)	-0.006801	-60	-58	Yes	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-38	-4.08	-56	-43	Yes	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-41	-2.779	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-43	0.7481	72	43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.118	59	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.0863	-67	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.232	68	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.9737	-45	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.574	-62	-58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-38	-30.07	-64	-43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-42	-11.87	-44	-43	Yes	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-2.036	-56	-43	Yes	13	7.692	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.949	63	48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.7865	60	58	Yes	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1168	-63	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.3002	76	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.189	71	58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.9116	-83	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.5003	-45	-43	Yes	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.06529	-59	-58	Yes	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05699	-66	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-18S (bg)	-0.05702	-88	-81	Yes	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-21I (bg)	0.2015	107	81	Yes	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-39 (bg)	-0.2384	-89	-58	Yes	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-5D (bg)	-0.09849	-78	-74	Yes	19	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.687	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-12.05	-54	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.891	-96	-58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09335	70	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-38	-145.1	-67	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-42	-113.1	-49	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-43	54	56	43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-25.19	-71	-43	Yes	13	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	25.64	66	48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.091	76	58	Yes	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.4938	60	58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-18.83	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-18.77	-74	-58	Yes	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-198	-48	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-41	-134.8	-62	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-42	-168.3	-56	-43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-43	111.1	70	43	Yes	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-14.88	-54	-43	Yes	13	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	-0.0002497	-11	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-34	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	-0.0003285	-14	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-15	-58	No	16	87.5	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWA-21I (bg)**	**-0.006801**	**-60**	**-58**	**Yes**	**16**	**56.25**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-39 (bg)	0.002402	14	43	No	13	7.692	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-40 (bg)	-0.02279	-41	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-4I (bg)	0	-17	-58	No	16	62.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0001974	12	58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	-0.0019	-46	-58	No	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.1172	-38	-58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-38**	**-4.08**	**-56**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-41**	**-2.779**	**-44**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWC-42	-1.536	-37	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-43**	**0.7481**	**72**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-47 (bg)	-0.001291	-39	-43	No	13	0	n/a	n/a	0.01	NP
Boron (mg/L)	GWA-2 (bg)	0	5	48	No	14	57.14	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.00131	-37	-58	No	16	12.5	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0	-2	-58	No	16	25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-23	-58	No	16	68.75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-18	-58	No	16	75	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-28	-58	No	16	81.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-8	-58	No	16	56.25	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-23	-58	No	16	87.5	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.118**	**59**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.02122	10	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.0863**	**-67**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.09145	54	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.232**	**68**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	0.4473	13	43	No	13	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-40 (bg)**	**-0.9737**	**-45**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-4I (bg)	0.2746	37	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-2.574**	**-62**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-5I (bg)	0.09171	50	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-30.07**	**-64**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWC-42**	**-11.87**	**-44**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-47 (bg)**	**-2.036**	**-56**	**-43**	**Yes**	**13**	**7.692**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GWA-2 (bg)**	**4.949**	**63**	**48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-14S (bg)	-0.03659	-46	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-1D (bg)**	**0.7865**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.1168**	**-63**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0.5792	38	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0	-6	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.7746	48	58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.43	27	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.3002**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.05099	35	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2082	50	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.189**	**71**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.1117	-28	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.2329	13	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.1751	26	43	No	13	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1099	36	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.9116**	**-83**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-5I (bg)	0	-1	-58	No	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limits Exceedances - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.5003**	**-45**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GWA-2 (bg)	0.1272	29	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1626	30	58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	-0.02735	-40	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	-0.02869	-33	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.05296	-45	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	0	-21	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.06529**	**-59**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-3I (bg)**	**-0.05699**	**-66**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWC-24SA	0.4282	54	58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-17S (bg)	-0.005007	-36	-74	No	19	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-18I (bg)	-0.01164	-23	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-18S (bg)**	**-0.05702**	**-88**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-20S (bg)	0.03	81	81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-21I (bg)**	**0.2015**	**107**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	**YGWA-39 (bg)**	**-0.2384**	**-89**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-40 (bg)	0.005552	4	58	No	16	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-4I (bg)	-0.02017	-44	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	**YGWA-5D (bg)**	**-0.09849**	**-78**	**-74**	**Yes**	**19**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (S.U.)	YGWA-5I (bg)	0	-7	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWC-41	0.04117	13	53	No	15	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-47 (bg)	-0.0262	-37	-48	No	14	0	n/a	n/a	0.01	NP
pH (S.U.)	GWA-2 (bg)	-0.03439	-128	-139	No	29	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-14S (bg)	-0.003962	-13	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-1D (bg)	-0.06046	-60	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-1I (bg)	-0.05767	-78	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-2I (bg)	0.005696	10	81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-30I (bg)	0.002608	7	81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-3D (bg)	-0.006892	-11	-81	No	20	0	n/a	n/a	0.01	NP
pH (S.U.)	YGWA-3I (bg)	-0.03856	-36	-81	No	20	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-17S (bg)	0.1322	51	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.2007	-54	-58	No	16	25	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1939	-48	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	24	58	No	16	62.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.2852	-25	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-3.687**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-12.05**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.1751	39	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-3.891**	**-96**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.09335**	**70**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-145.1**	**-67**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-42**	**-113.1**	**-49**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-43**	**54**	**56**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-25.19**	**-71**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**25.64**	**66**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-14S (bg)	0.09469	17	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.091**	**76**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.2947	-23	-58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.1728	11	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.08892	-28	-58	No	16	12.5	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.4938**	**60**	**58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-3I (bg)	0.6094	45	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	4.826	22	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-2.316	-19	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	3.74	25	58	No	16	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - Prediction Limits Exceedances - All Results

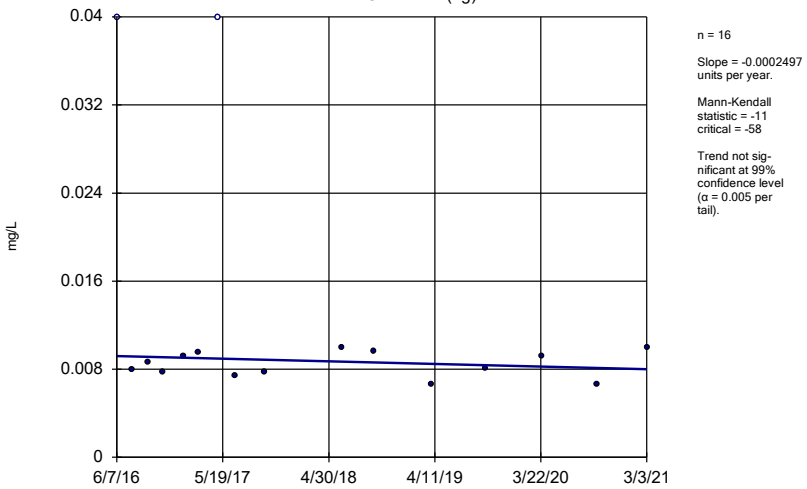
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:52 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	3.156	31	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	15.05	46	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	17.14	28	43	No	13	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-40 (bg)**	**-18.83**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	1.119	8	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-5D (bg)**	**-18.77**	**-74**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	-1.204	-7	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-38**	**-198**	**-48**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-41**	**-134.8**	**-62**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-42**	**-168.3**	**-56**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-43**	**111.1**	**70**	**43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWA-47 (bg)**	**-14.88**	**-54**	**-43**	**Yes**	**13**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GWA-2 (bg)	29.32	40	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	2.021	18	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	1.869	13	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-3.828	-26	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-3.302	-32	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	2.131	17	58	No	16	12.5	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	1.956	12	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	0.9644	5	58	No	16	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = -0.0002497 units per year.

Mann-Kendall statistic = -11
critical = -58

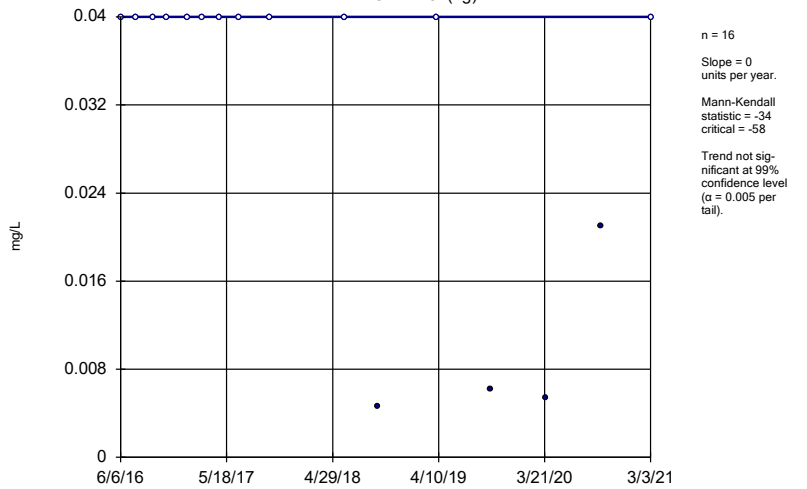
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:49 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -34
critical = -58

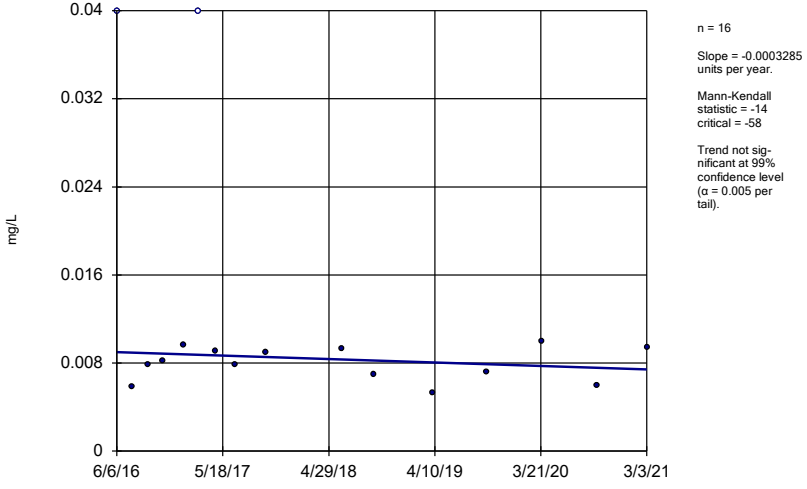
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = -0.0003285 units per year.

Mann-Kendall statistic = -14
critical = -58

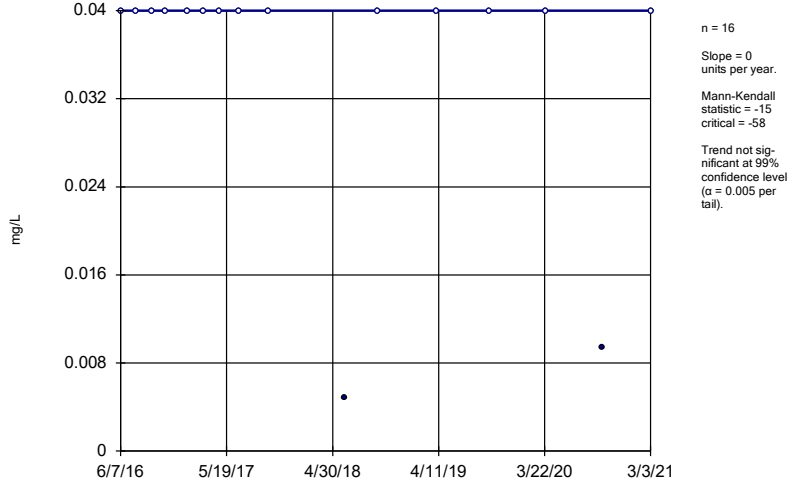
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -15
critical = -58

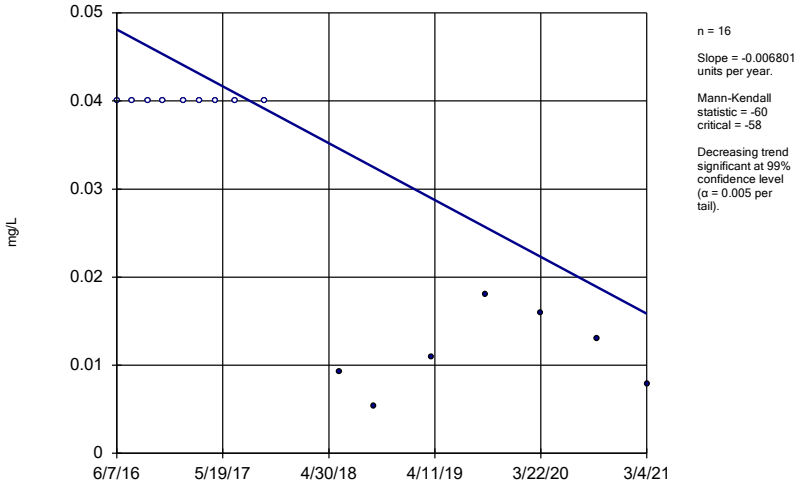
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = -0.006801 units per year.

Mann-Kendall statistic = -60
critical = -58

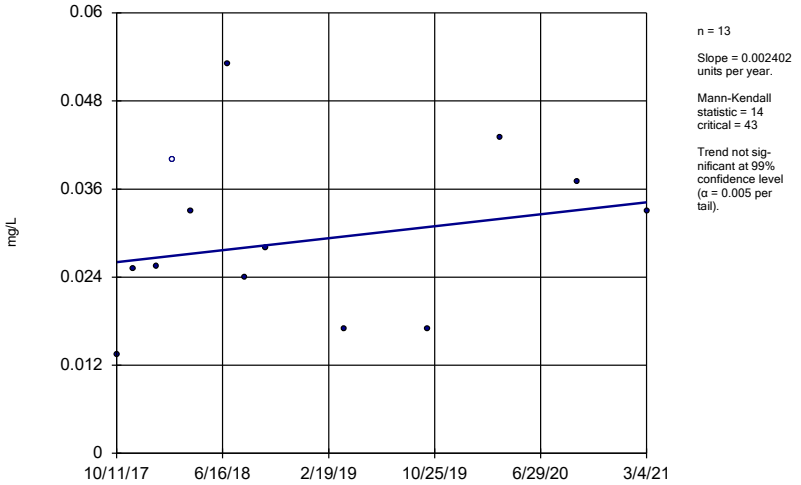
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 0.002402 units per year.

Mann-Kendall statistic = 14
critical = 43

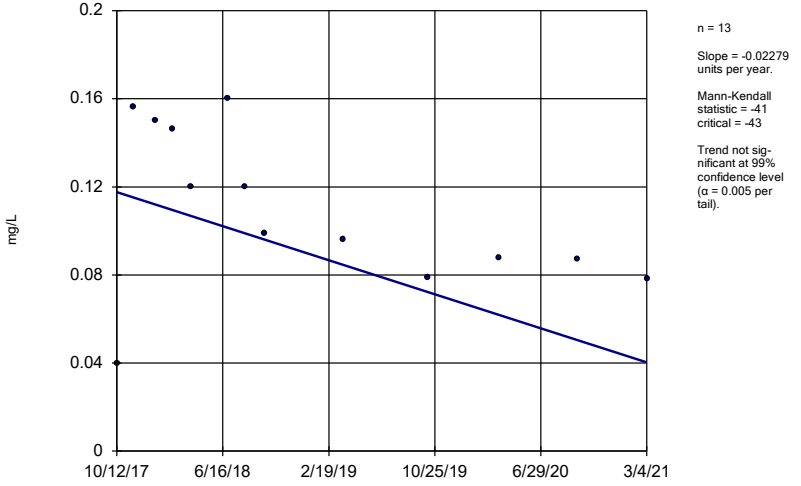
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -0.02279 units per year.

Mann-Kendall statistic = -41
critical = -43

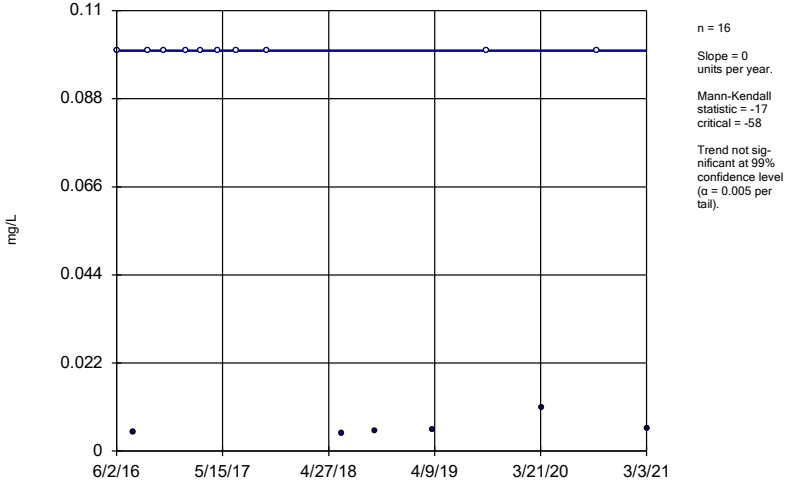
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -17
critical = -58

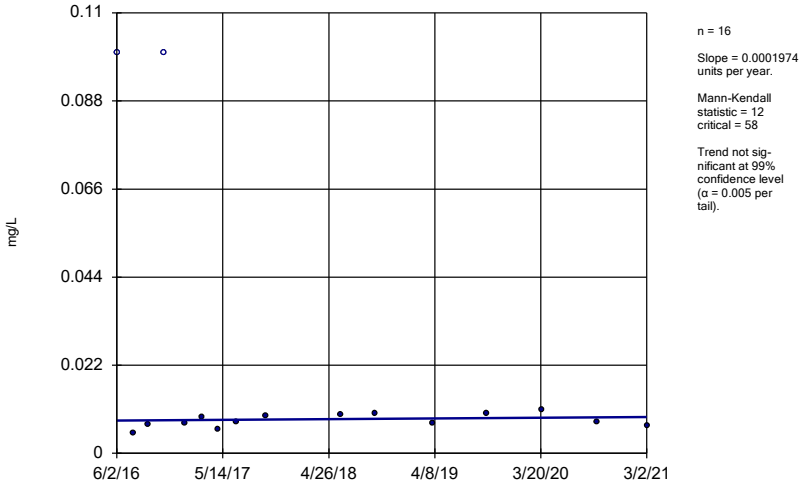
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = 0.0001974 units per year.

Mann-Kendall statistic = 12
critical = 58

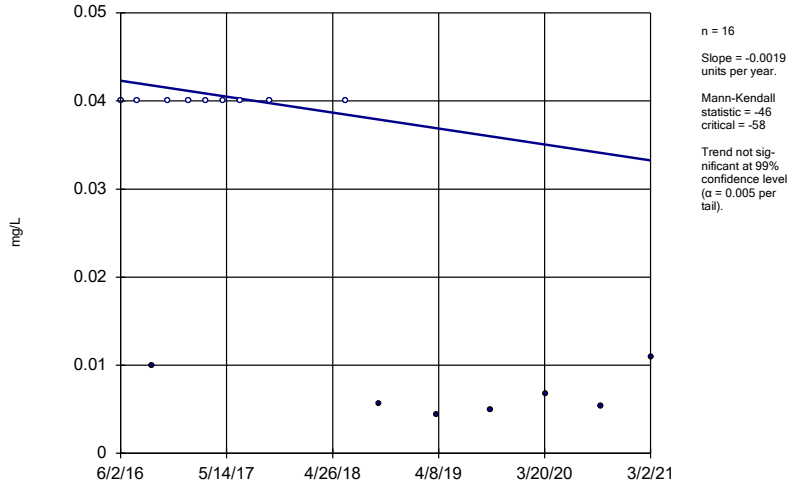
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = -0.0019 units per year.

Mann-Kendall statistic = -46
critical = -58

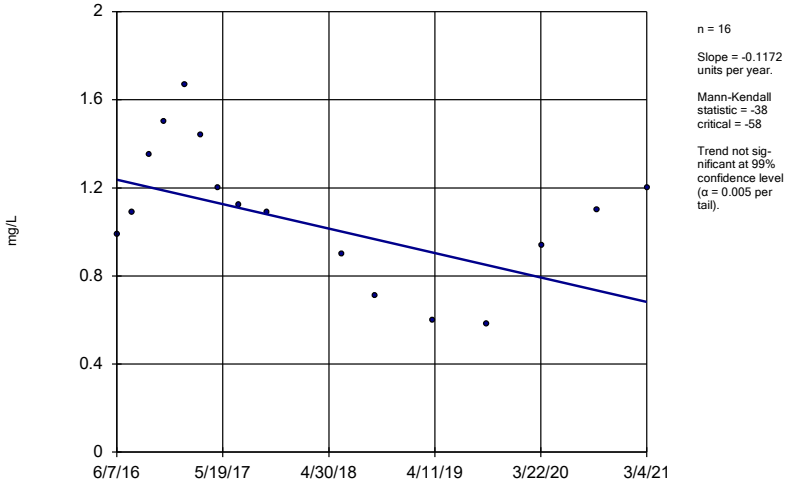
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-23S



n = 16

Slope = -0.1172 units per year.

Mann-Kendall statistic = -38
critical = -58

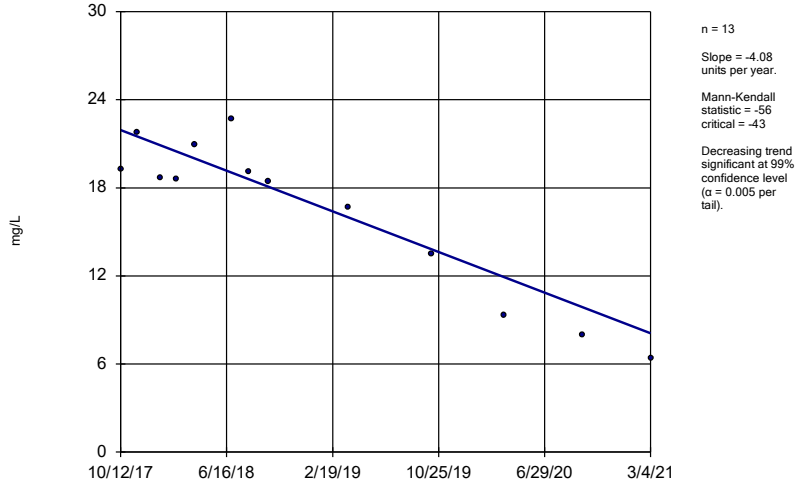
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 13

Slope = -4.08 units per year.

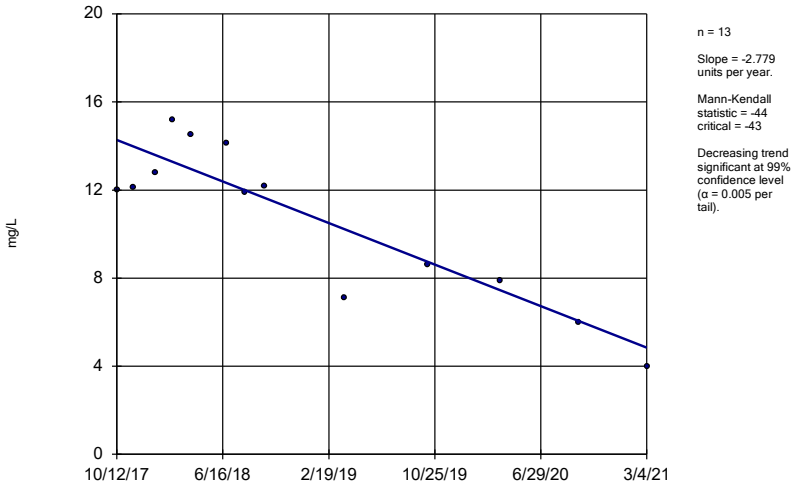
Mann-Kendall statistic = -56
critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-41



n = 13

Slope = -2.779 units per year.

Mann-Kendall statistic = -44
critical = -43

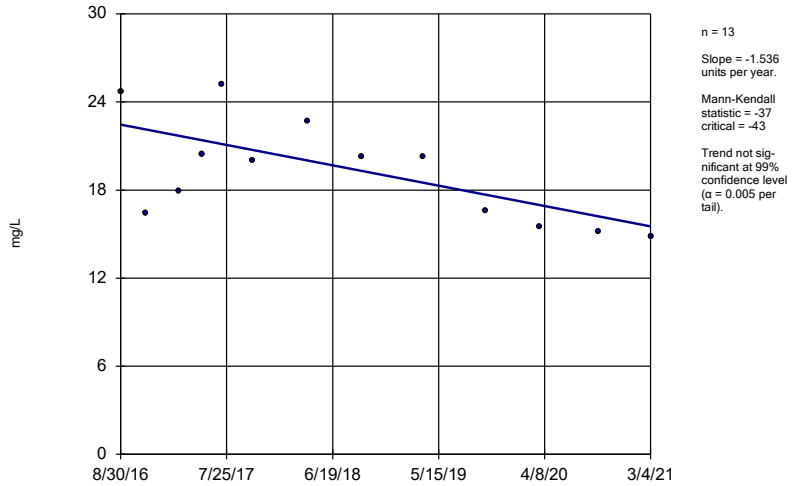
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 13

Slope = -1.536 units per year.

Mann-Kendall statistic = -37
critical = -43

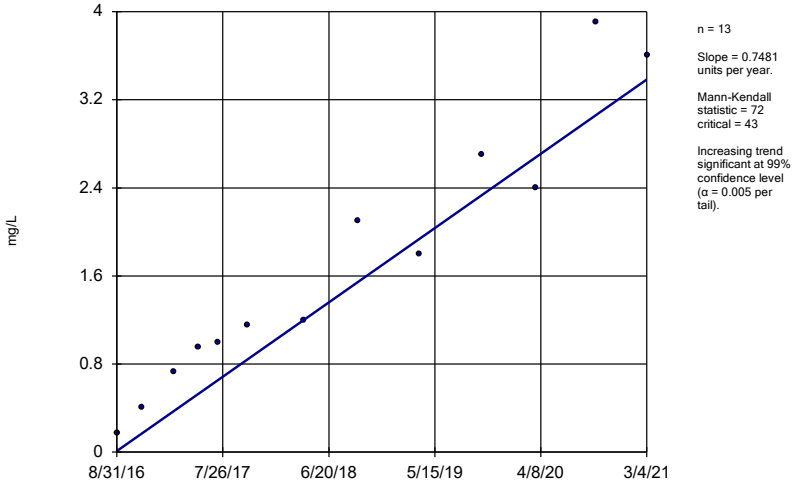
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 13

Slope = 0.7481 units per year.

Mann-Kendall statistic = 72
critical = 43

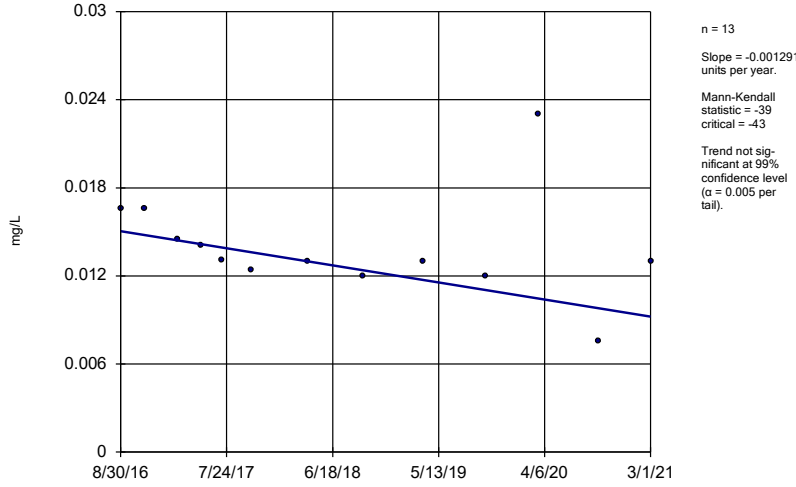
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -0.001291 units per year.

Mann-Kendall statistic = -39
critical = -43

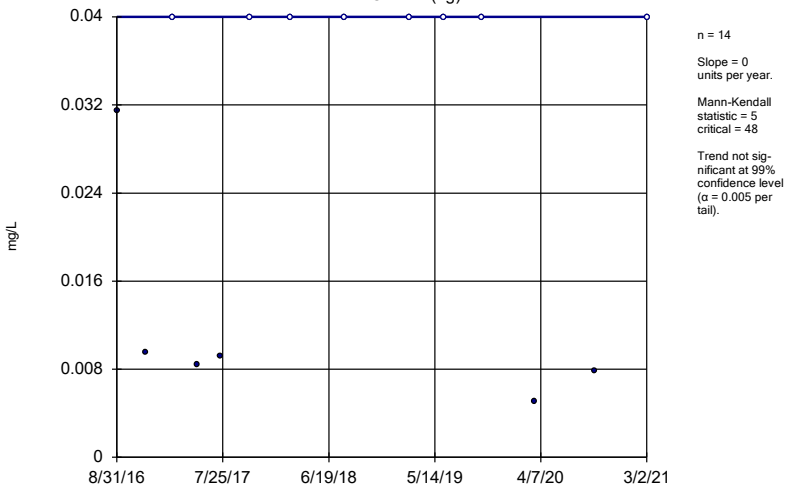
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 5
critical = 48

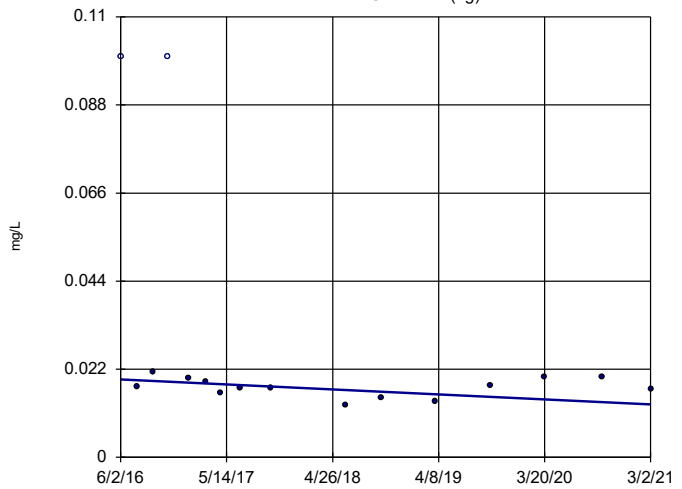
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = -0.00131 units per year.

Mann-Kendall statistic = -37
critical = -58

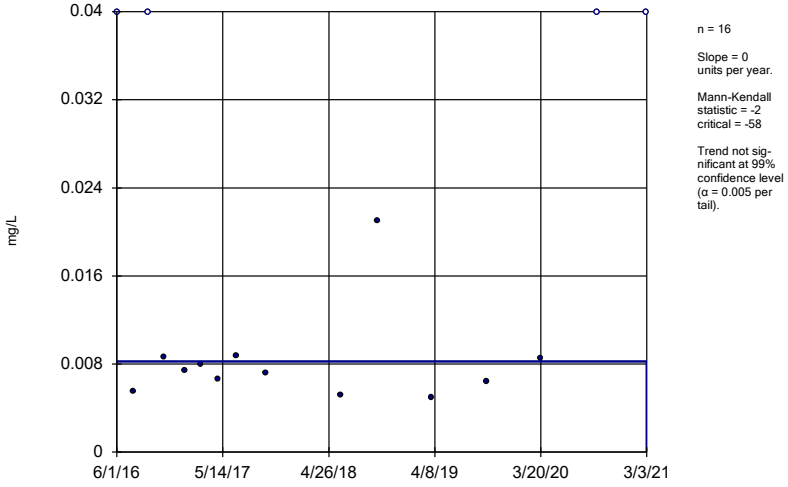
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -2
critical = -58

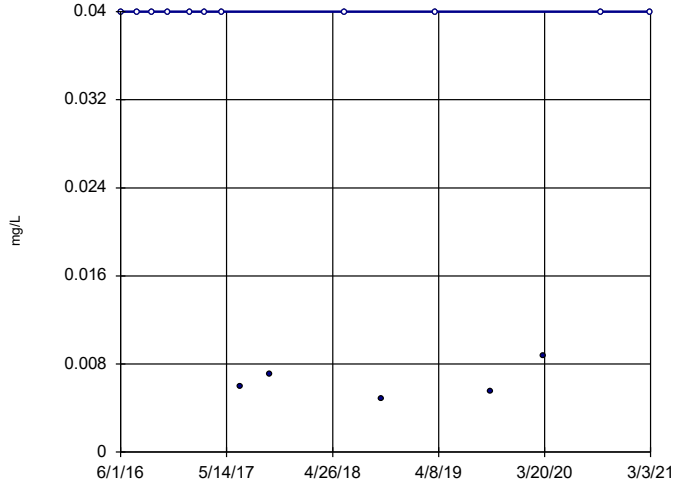
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -23
critical = -58

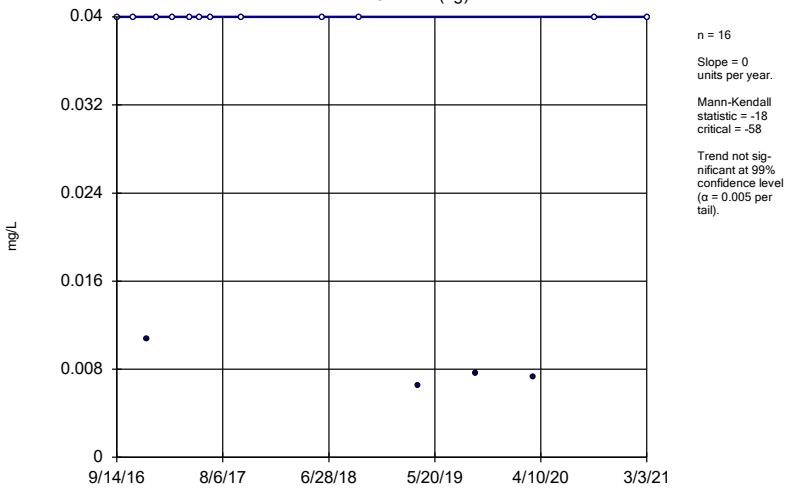
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -18
critical = -58

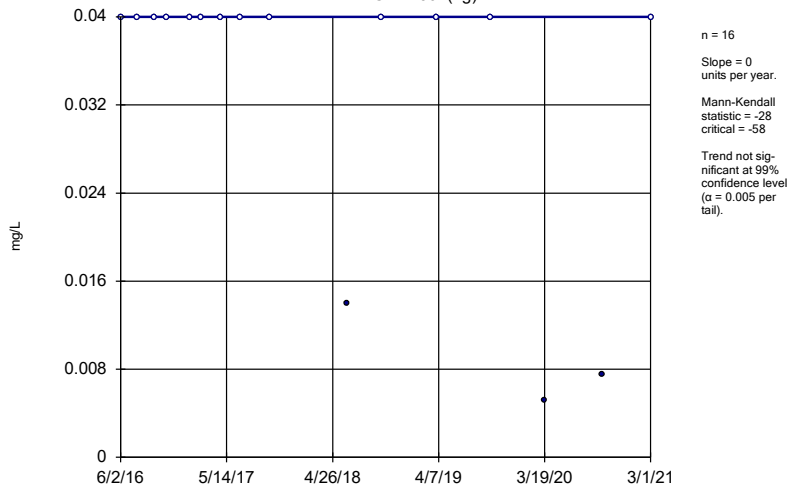
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -28
critical = -58

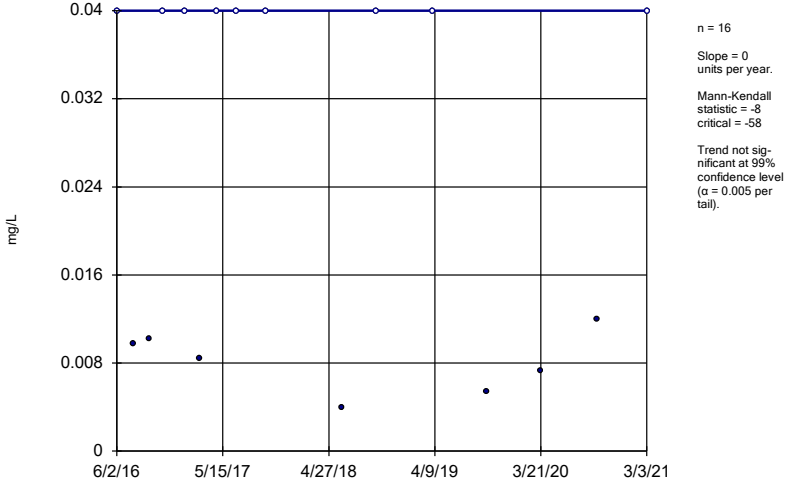
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -8
critical = -58

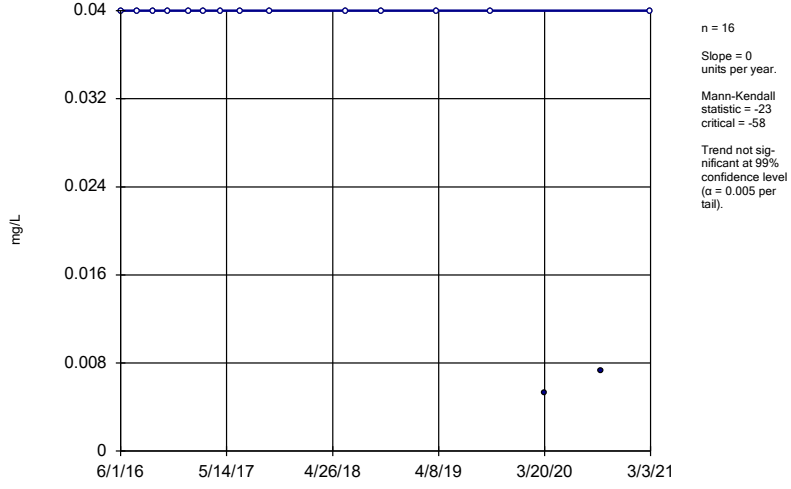
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0 units per year.

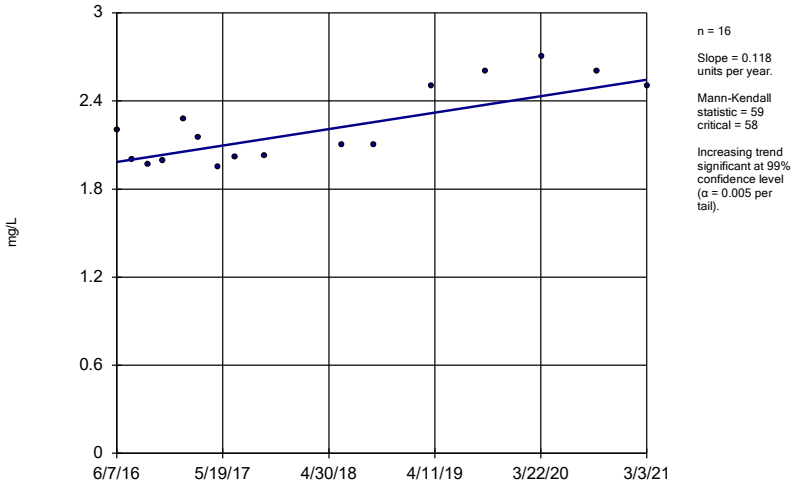
Mann-Kendall statistic = -23
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 0.118 units per year.

Mann-Kendall statistic = 59 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

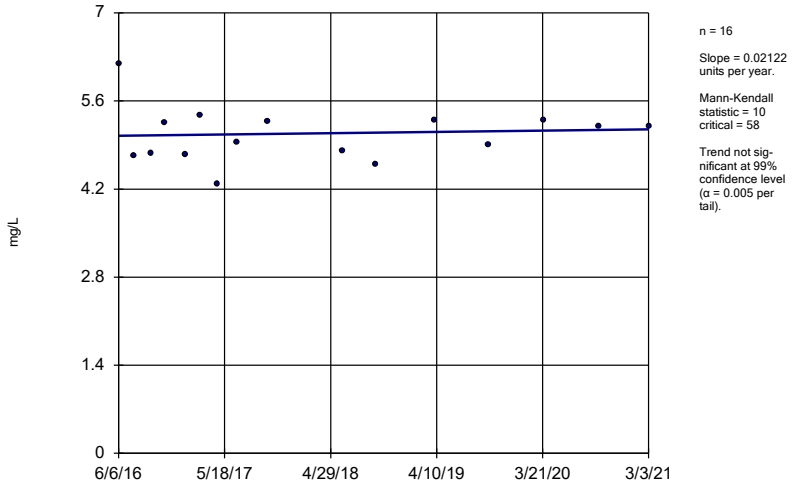
Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = 0.02122 units per year.

Mann-Kendall statistic = 10 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

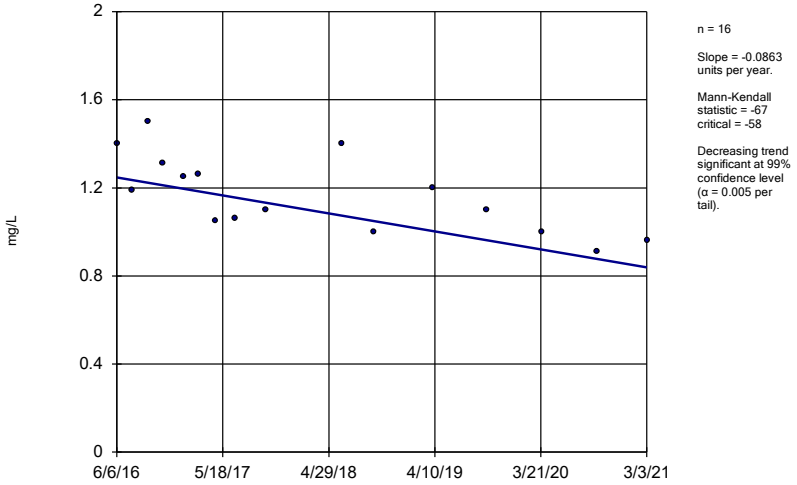
Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = -0.0863 units per year.

Mann-Kendall statistic = -67 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

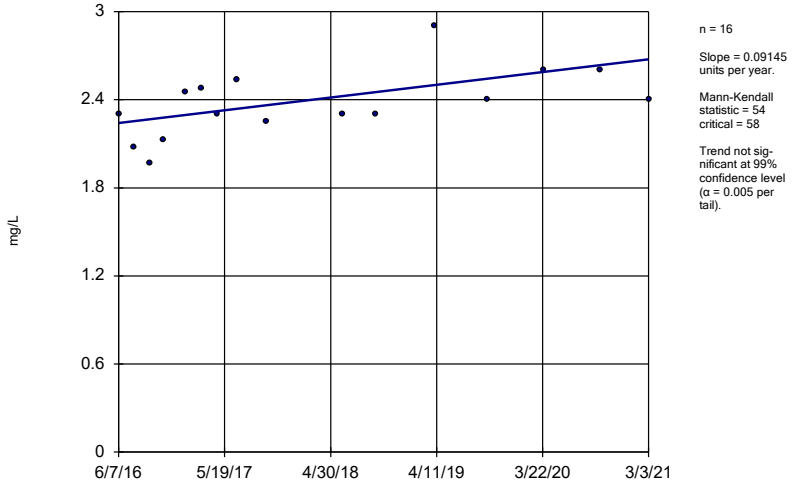
Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0.09145 units per year.

Mann-Kendall statistic = 54 critical = 58

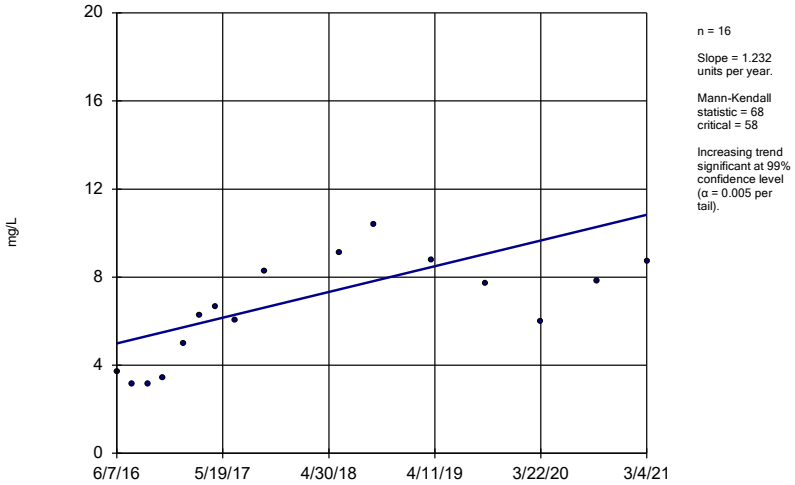
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = 1.232 units per year.

Mann-Kendall statistic = 68
critical = 58

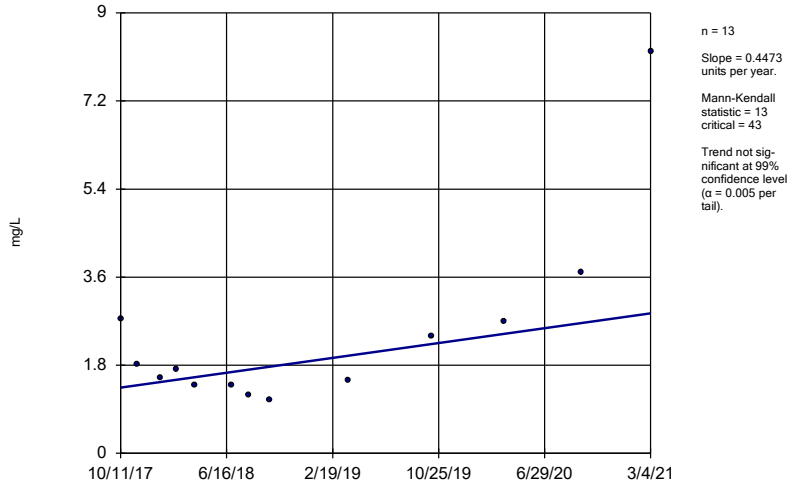
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 0.4473 units per year.

Mann-Kendall statistic = 13
critical = 43

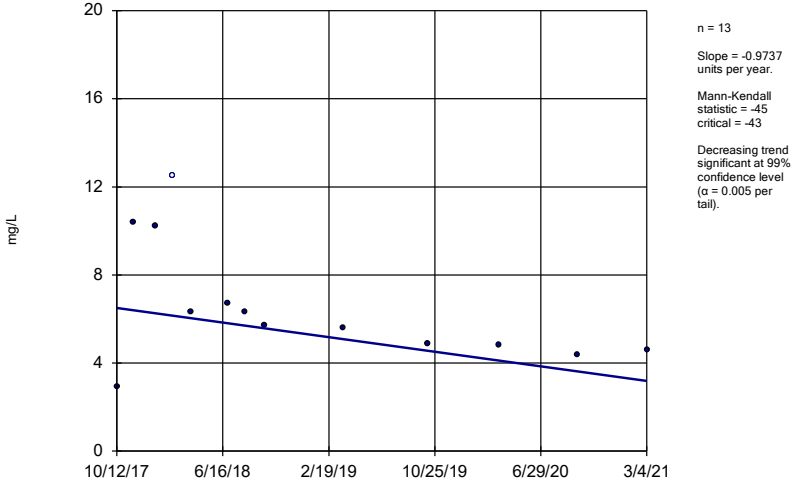
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -0.9737 units per year.

Mann-Kendall statistic = -45
critical = -43

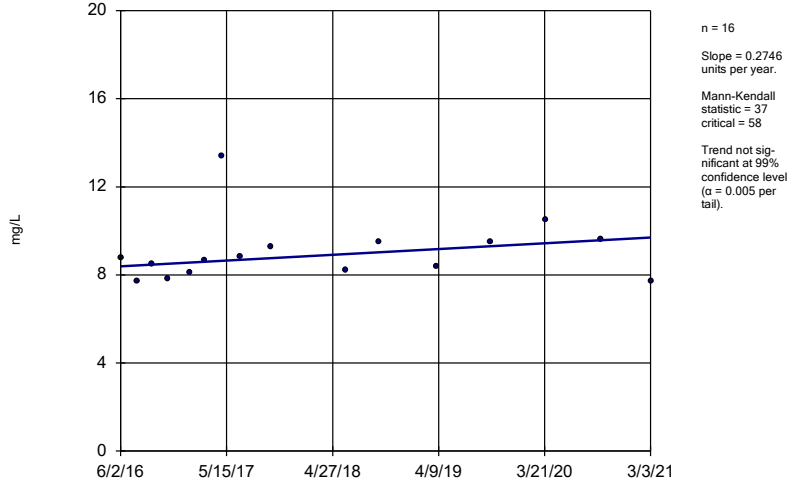
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0.2746 units per year.

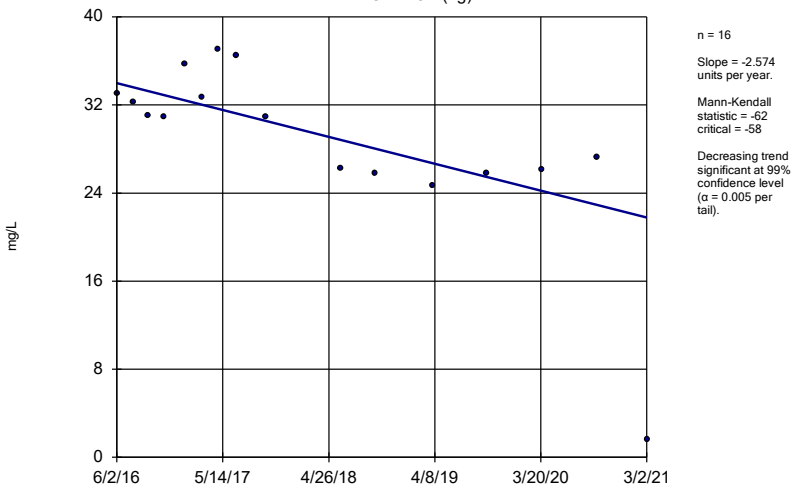
Mann-Kendall statistic = 37
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -2.574 units per year.

Mann-Kendall statistic = -62
critical = -58

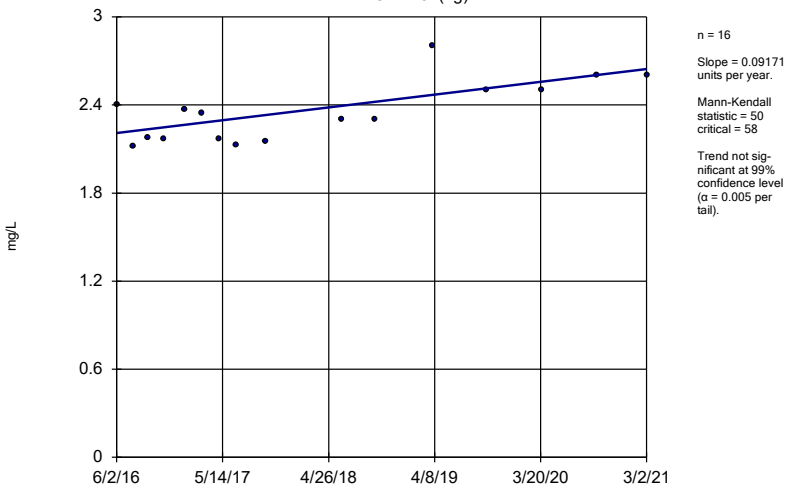
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = 0.09171 units per year.

Mann-Kendall statistic = 50
critical = 58

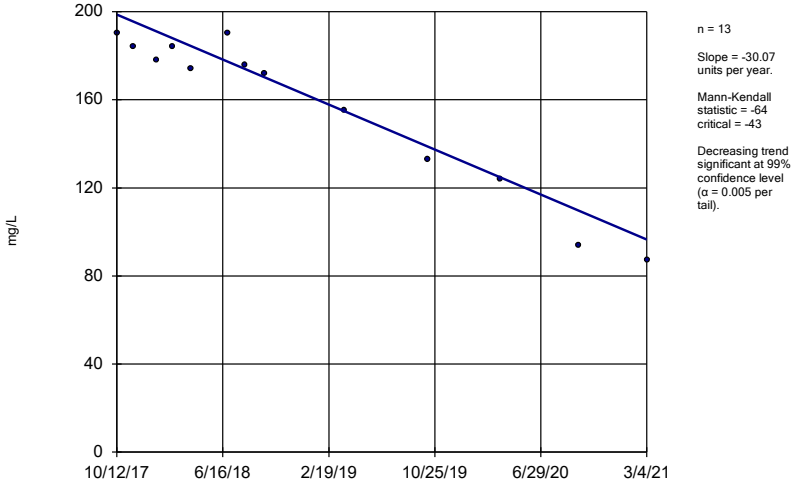
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 13

Slope = -30.07 units per year.

Mann-Kendall statistic = -64
critical = -43

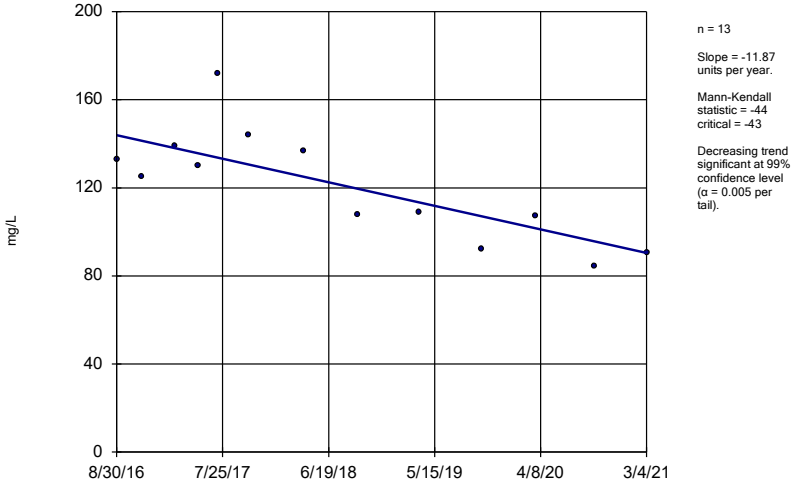
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 13

Slope = -11.87 units per year.

Mann-Kendall statistic = -44
critical = -43

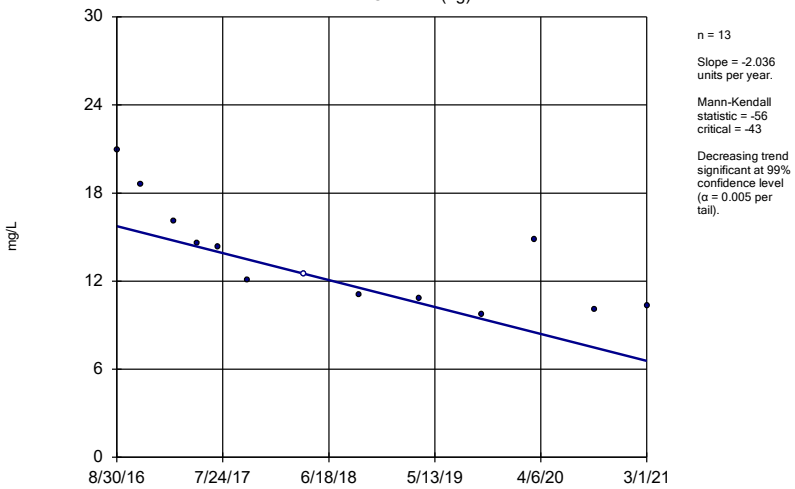
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -2.036 units per year.

Mann-Kendall statistic = -56
critical = -43

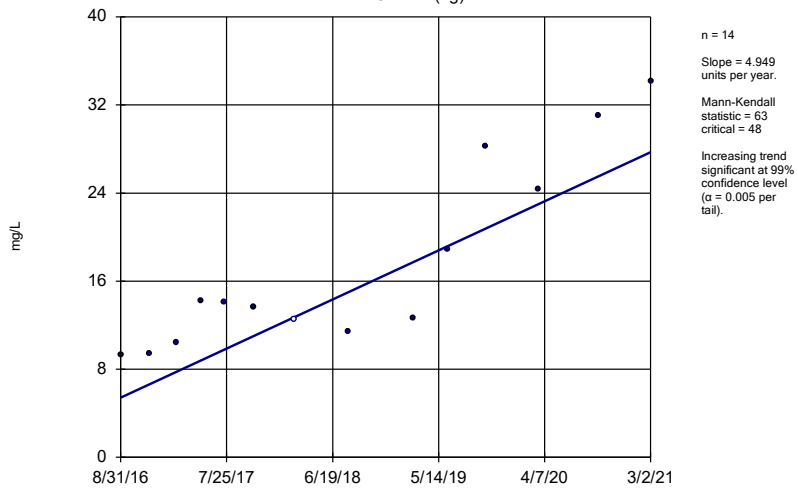
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 4.949 units per year.

Mann-Kendall statistic = 63
critical = 48

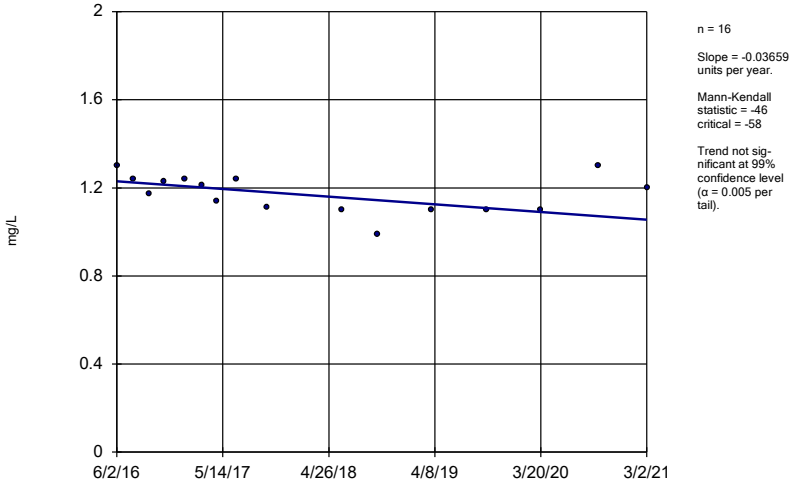
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = -0.03659 units per year.

Mann-Kendall statistic = -46
critical = -58

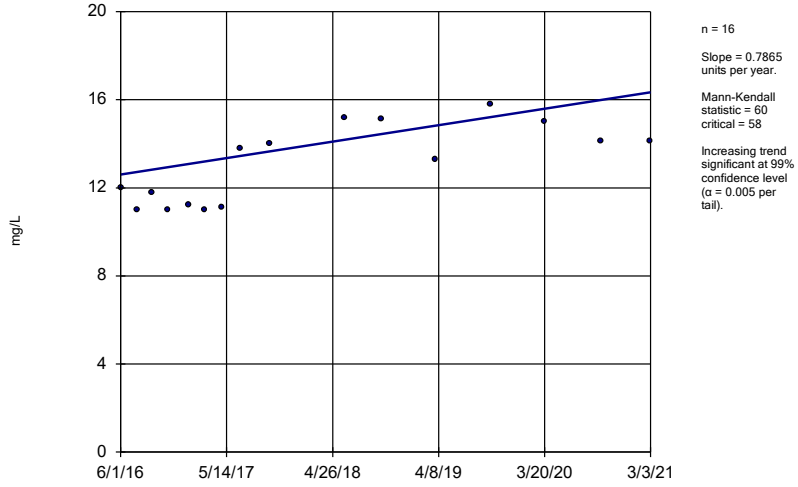
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 0.7865 units per year.

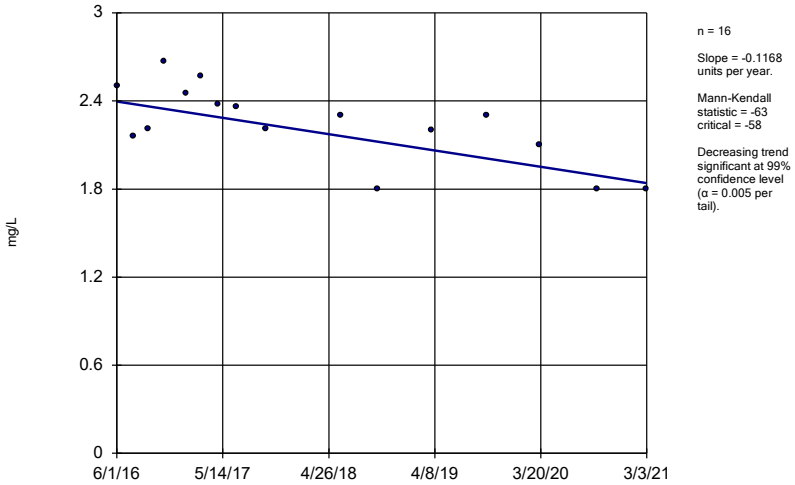
Mann-Kendall statistic = 60
critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -0.1168 units per year.

Mann-Kendall statistic = -63
critical = -58

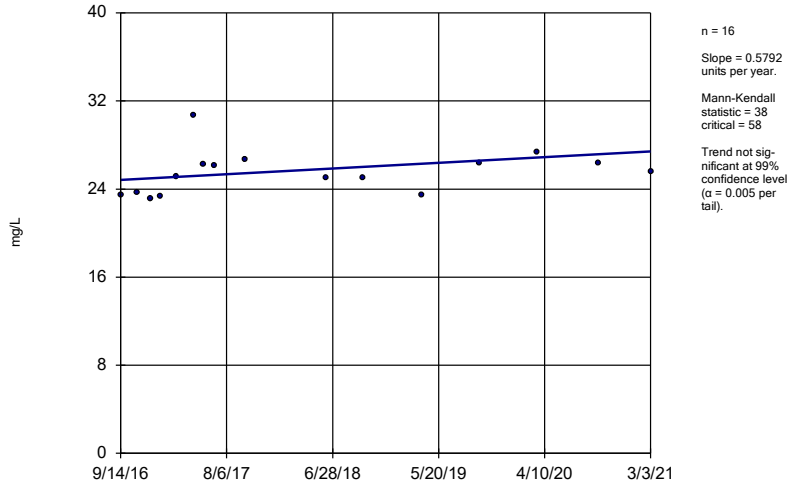
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = 0.5792 units per year.

Mann-Kendall statistic = 38
critical = 58

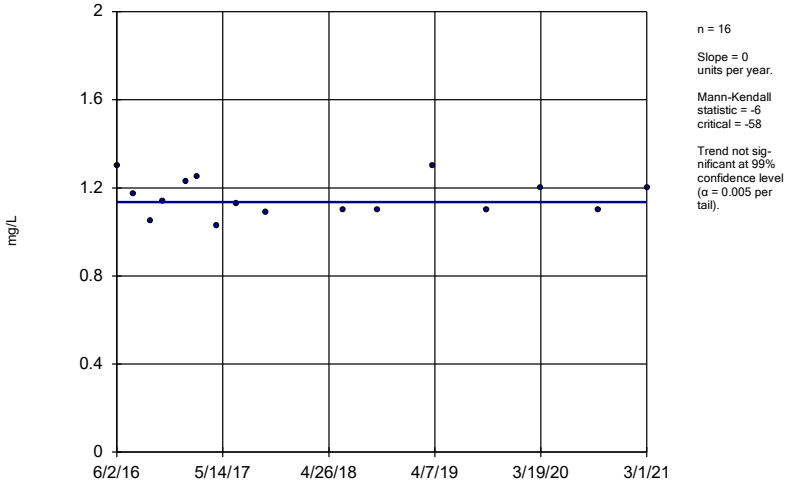
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -6
critical = -58

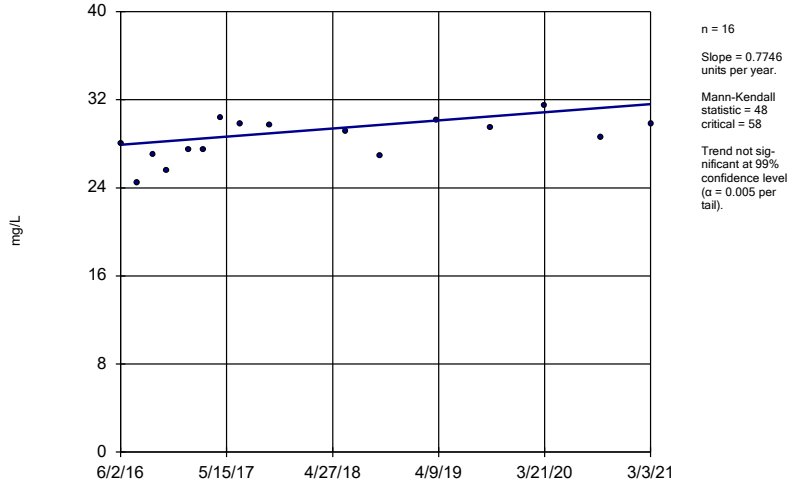
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 0.7746 units per year.

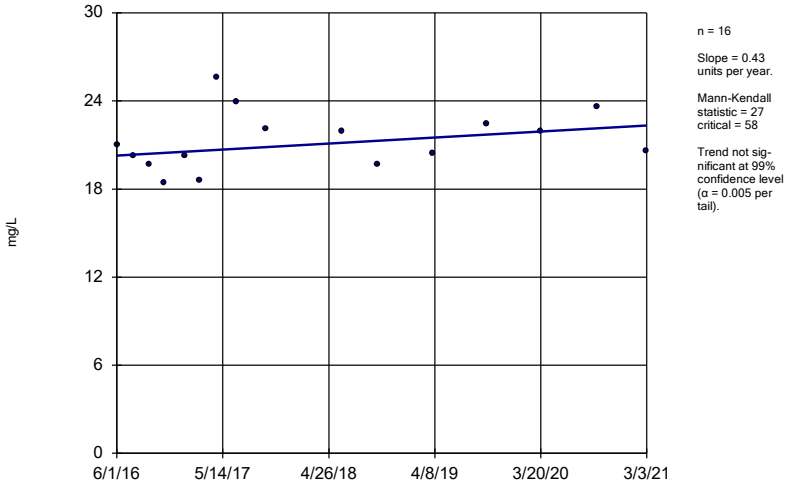
Mann-Kendall statistic = 48
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0.43 units per year.

Mann-Kendall statistic = 27 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

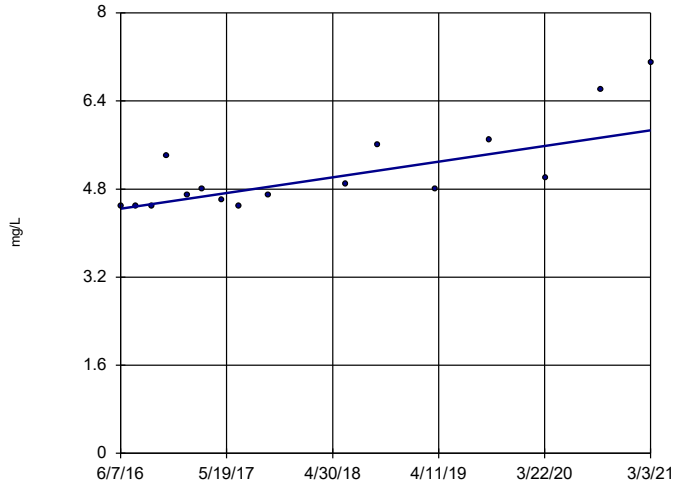
Constituent: Calcium Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 0.3002 units per year.

Mann-Kendall statistic = 76 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

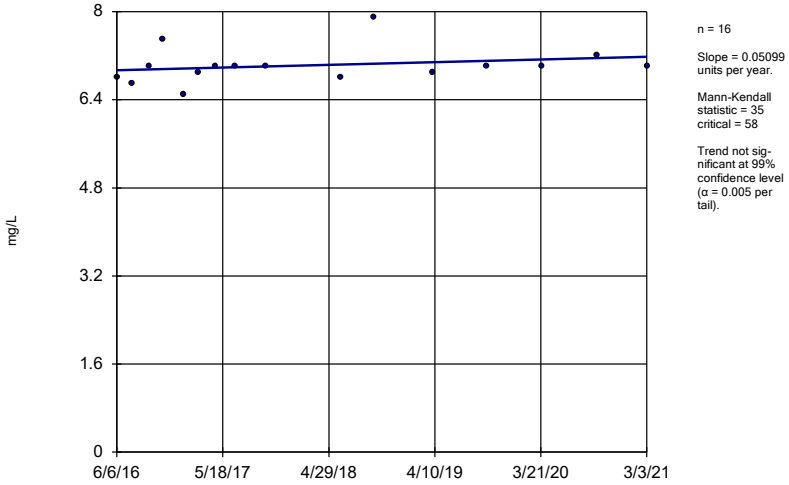
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = 0.05099 units per year.

Mann-Kendall statistic = 35 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

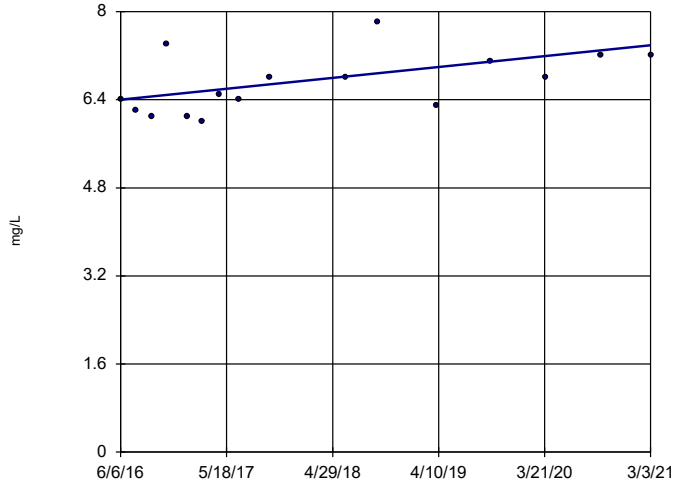
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = 0.2082 units per year.

Mann-Kendall statistic = 50 critical = 58

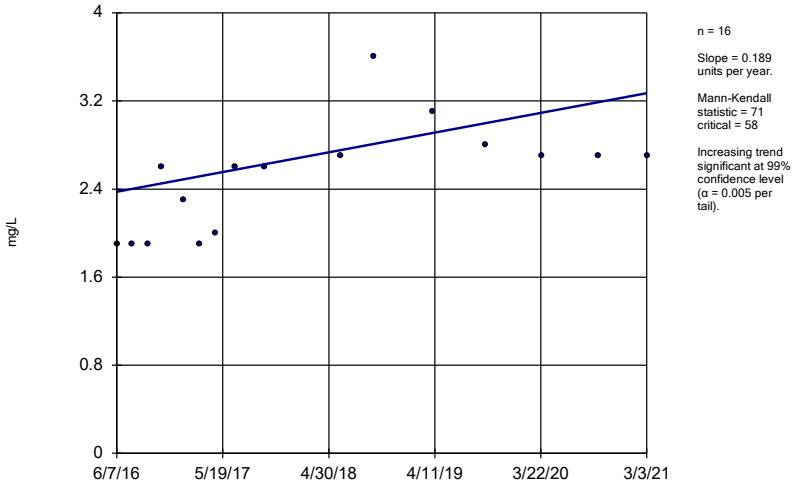
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0.189 units per year.

Mann-Kendall statistic = 71 critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

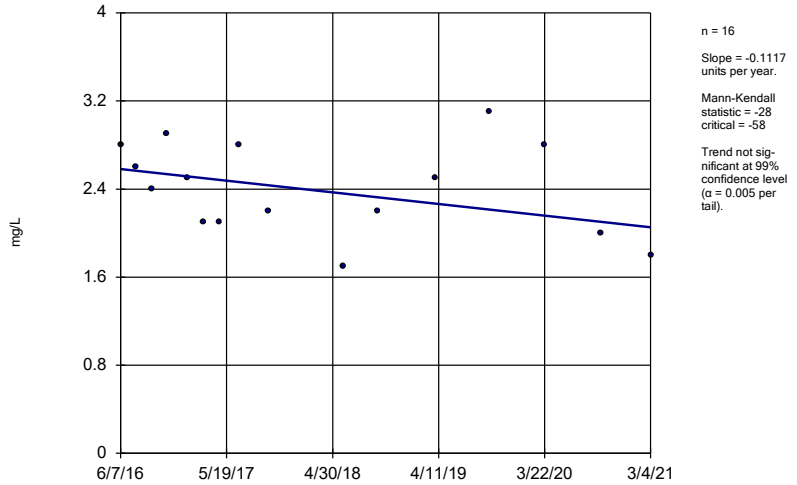
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = -0.1117 units per year.

Mann-Kendall statistic = -28 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

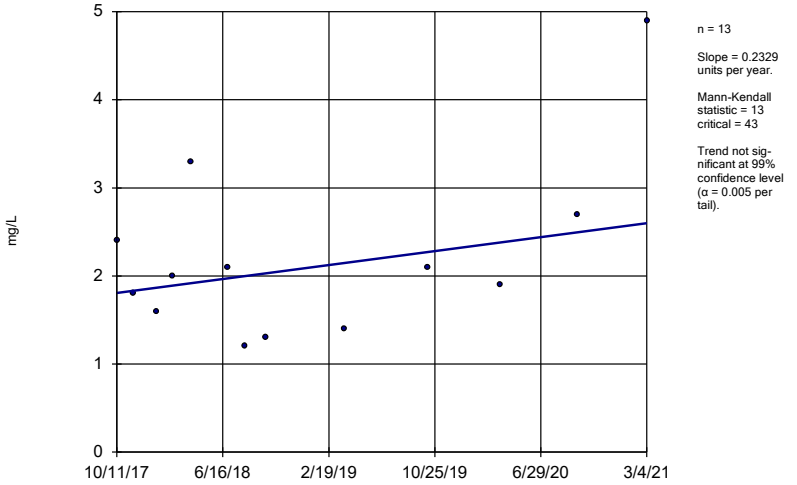
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 0.2329 units per year.

Mann-Kendall statistic = 13 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

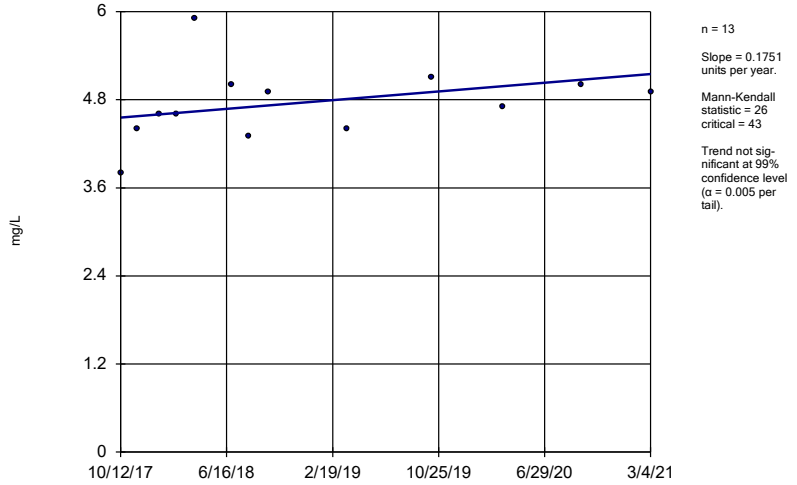
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = 0.1751 units per year.

Mann-Kendall statistic = 26 critical = 43

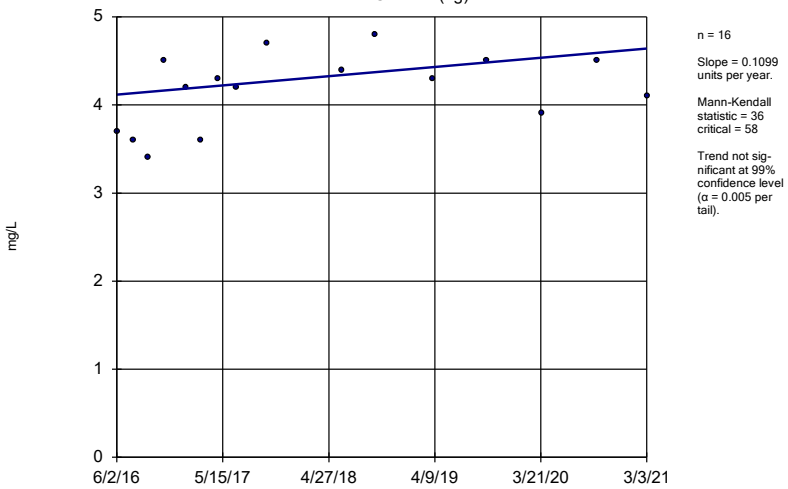
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0.1099 units per year.

Mann-Kendall statistic = 36
critical = 58

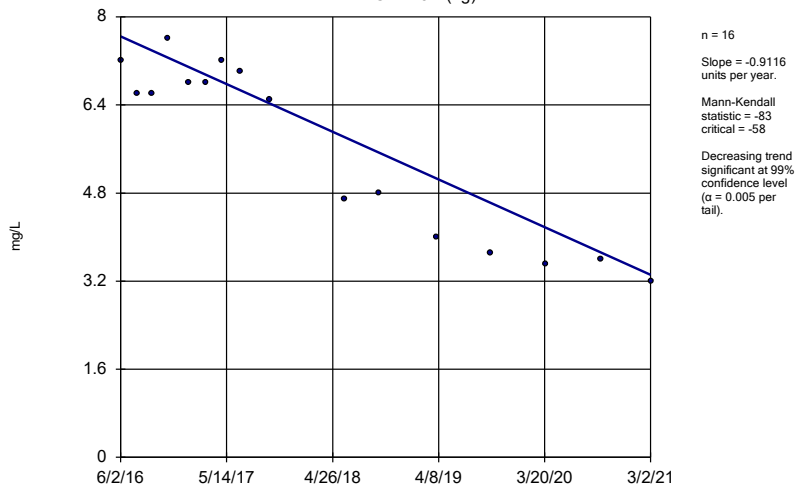
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -0.9116 units per year.

Mann-Kendall statistic = -83
critical = -58

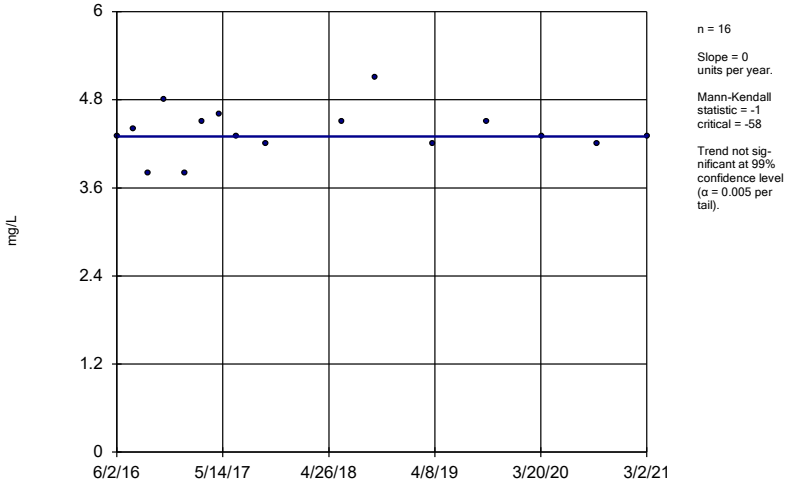
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -58

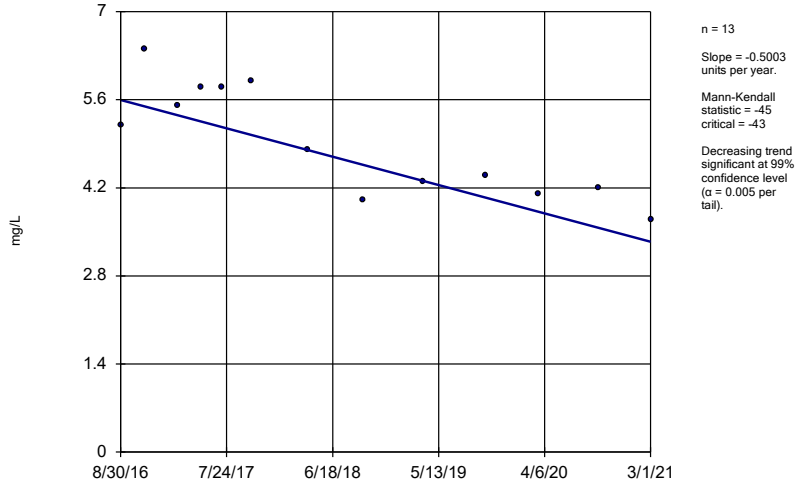
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -0.5003 units per year.

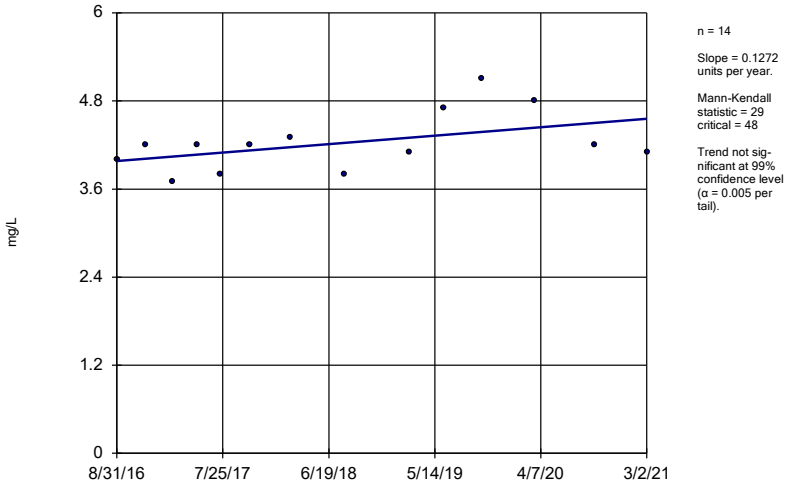
Mann-Kendall statistic = -45
critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 0.1272 units per year.

Mann-Kendall statistic = 29 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

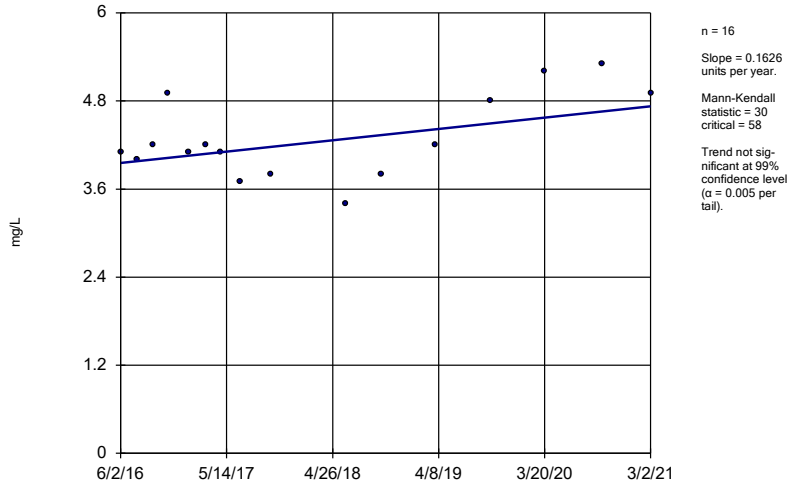
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = 0.1626 units per year.

Mann-Kendall statistic = 30 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

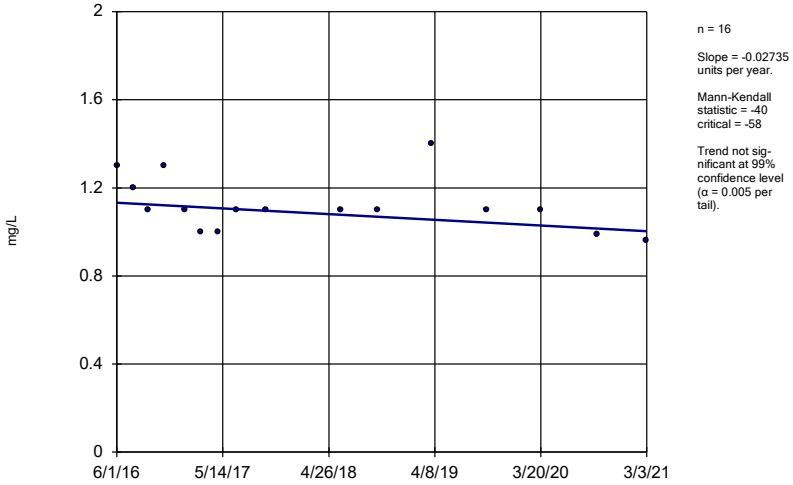
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = -0.02735 units per year.

Mann-Kendall statistic = -40 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

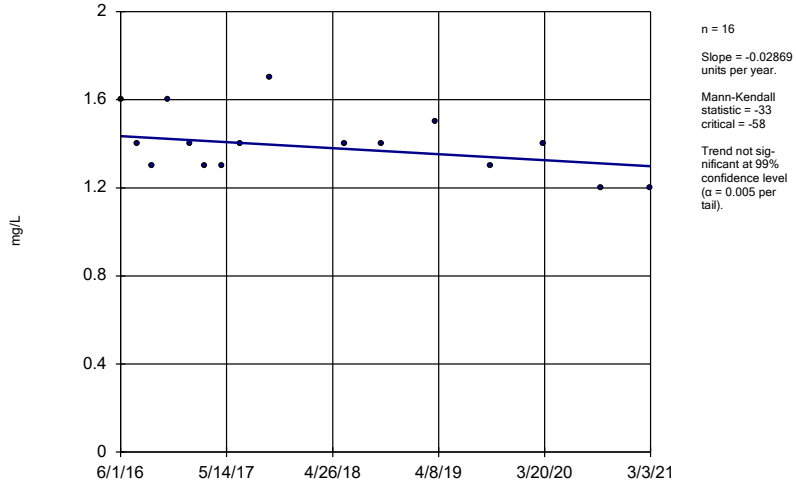
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -0.02869 units per year.

Mann-Kendall statistic = -33 critical = -58

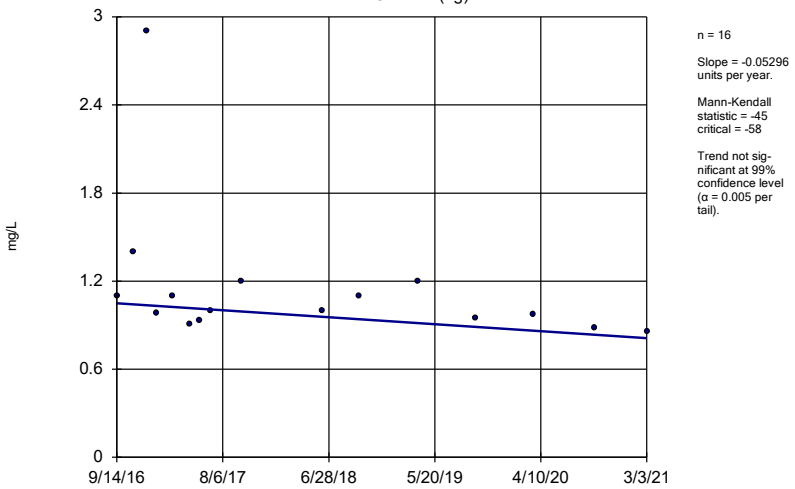
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = -0.05296 units per year.

Mann-Kendall statistic = -45 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

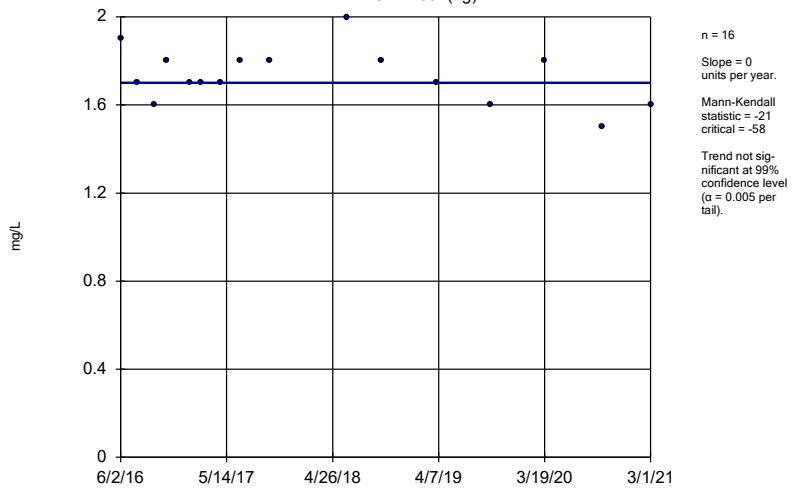
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -21 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

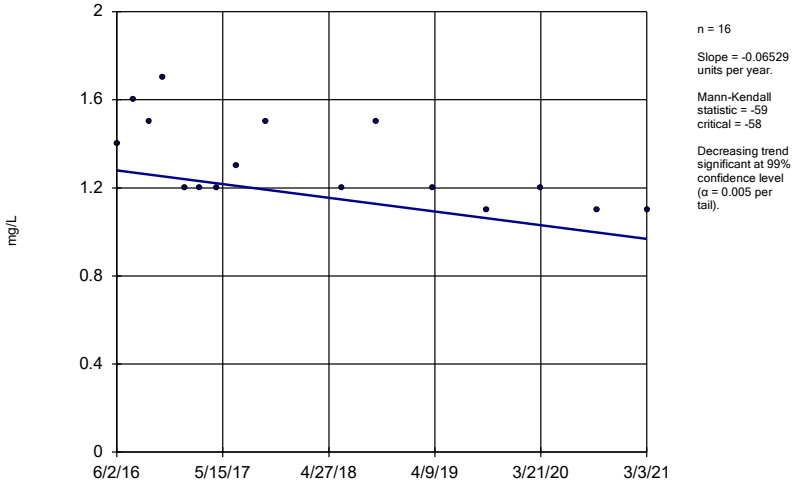
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = -0.06529 units per year.

Mann-Kendall statistic = -59 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

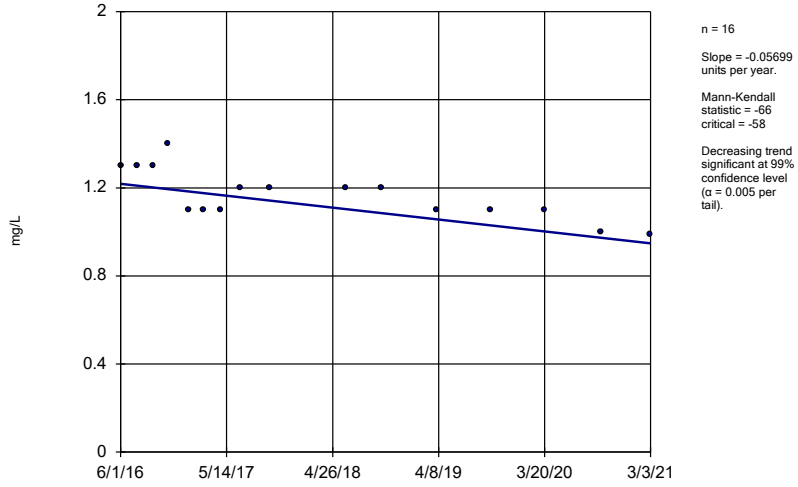
Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = -0.05699 units per year.

Mann-Kendall statistic = -66 critical = -58

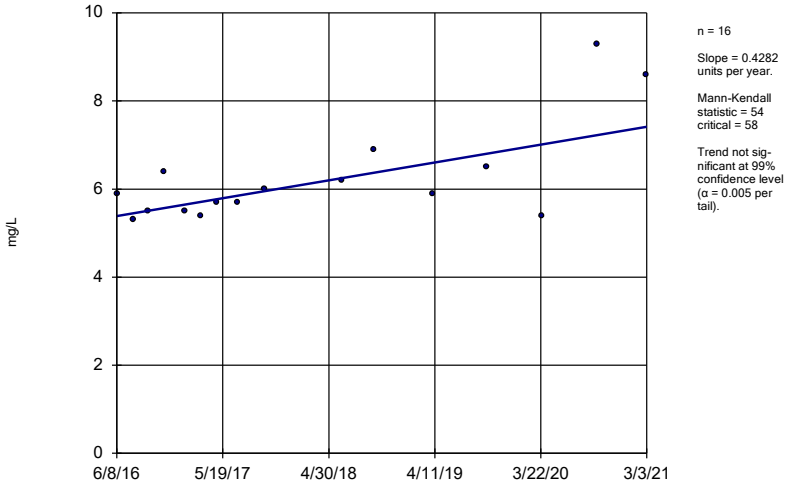
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-24SA



n = 16

Slope = 0.4282 units per year.

Mann-Kendall statistic = 54
critical = 58

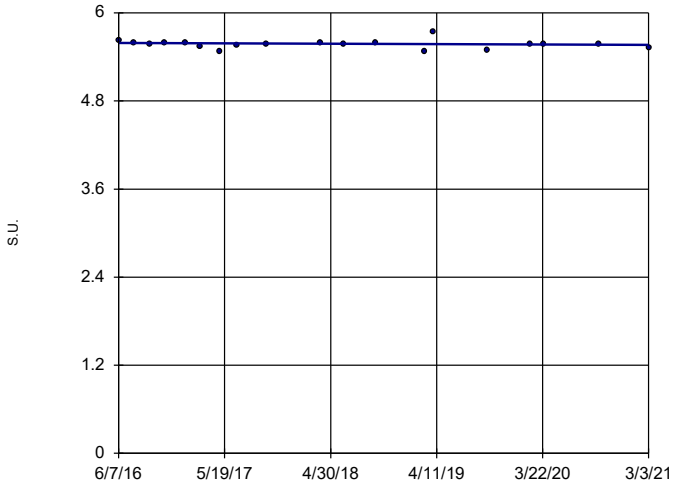
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 19

Slope = -0.005007 units per year.

Mann-Kendall statistic = -36
critical = -74

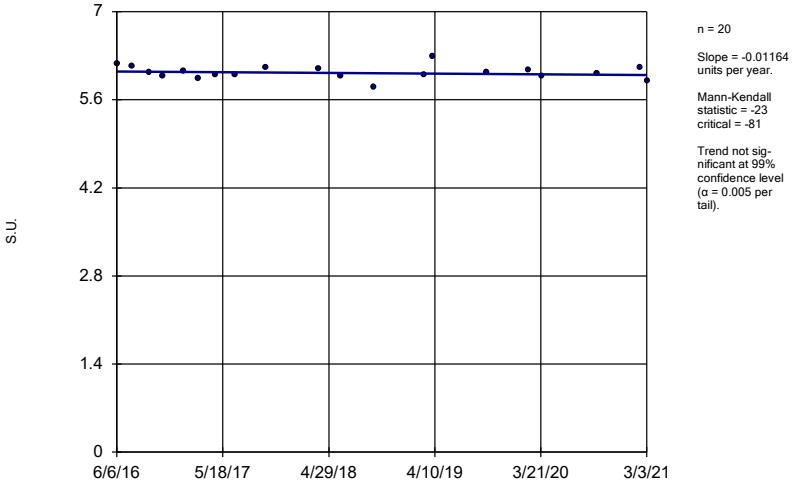
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 20

Slope = -0.01164 units per year.

Mann-Kendall statistic = -23
critical = -81

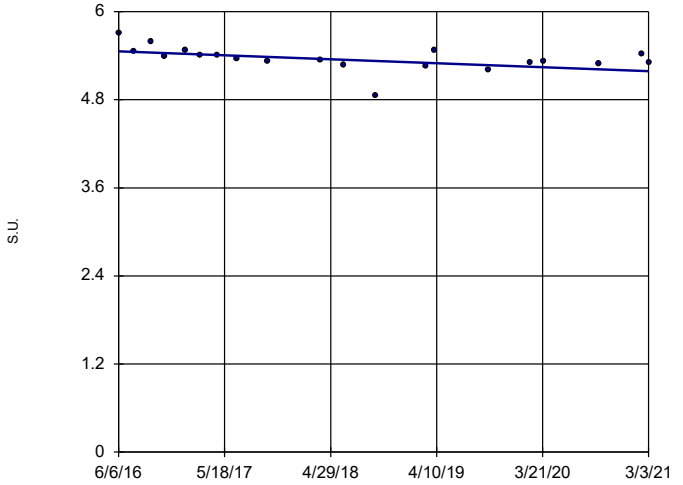
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 20

Slope = -0.05702 units per year.

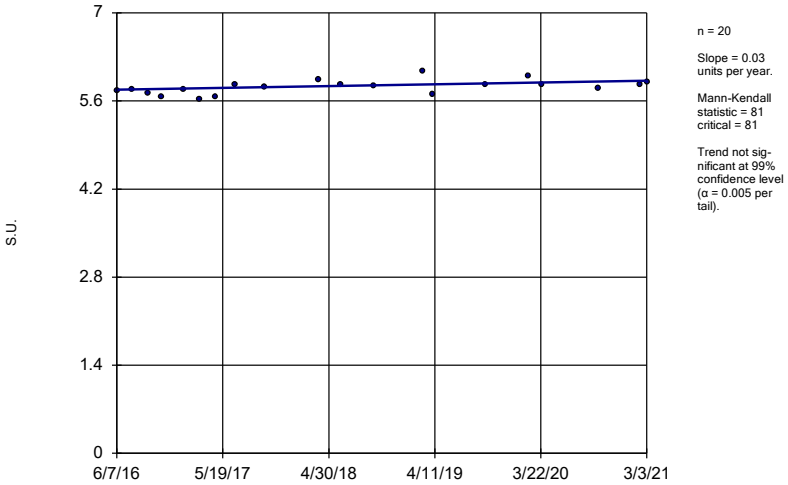
Mann-Kendall statistic = -88
critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-20S (bg)



n = 20

Slope = 0.03 units per year.

Mann-Kendall statistic = 81
critical = 81

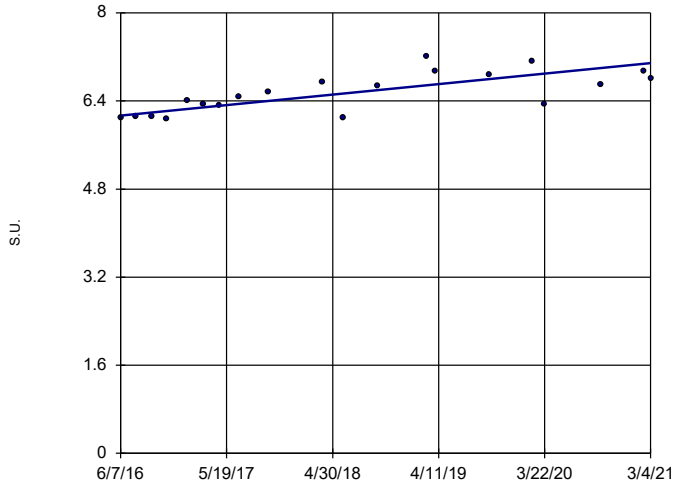
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 20

Slope = 0.2015 units per year.

Mann-Kendall statistic = 107
critical = 81

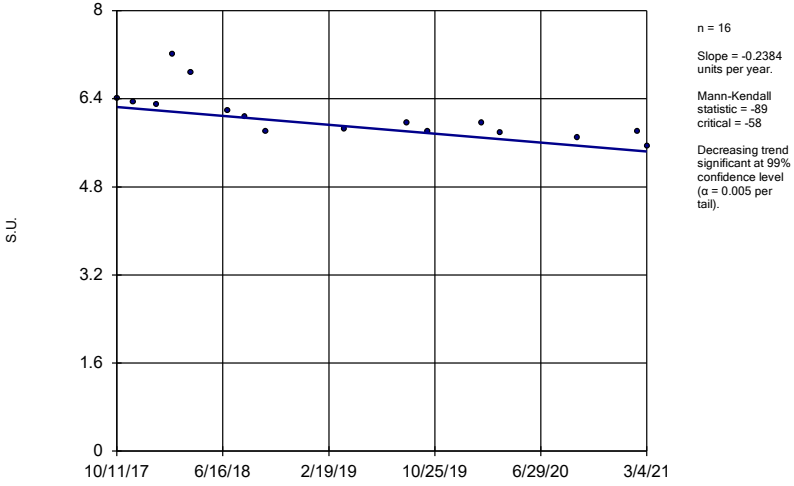
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 16

Slope = -0.2384 units per year.

Mann-Kendall statistic = -89
critical = -58

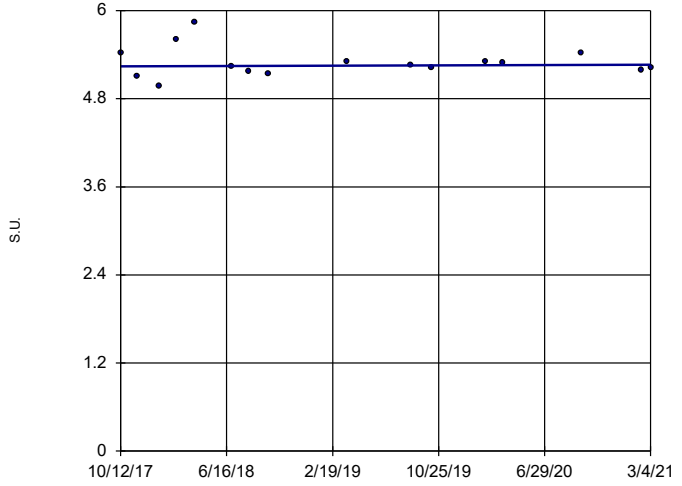
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 16

Slope = 0.005552 units per year.

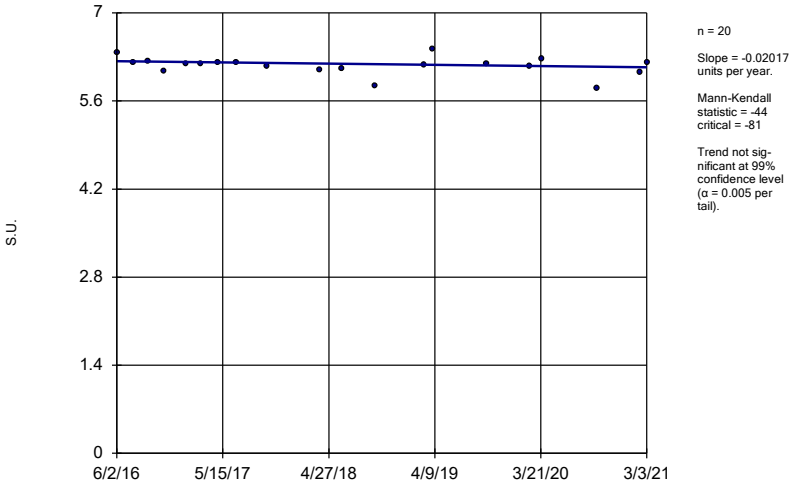
Mann-Kendall statistic = 4
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 20

Slope = -0.02017 units per year.

Mann-Kendall statistic = -44
critical = -81

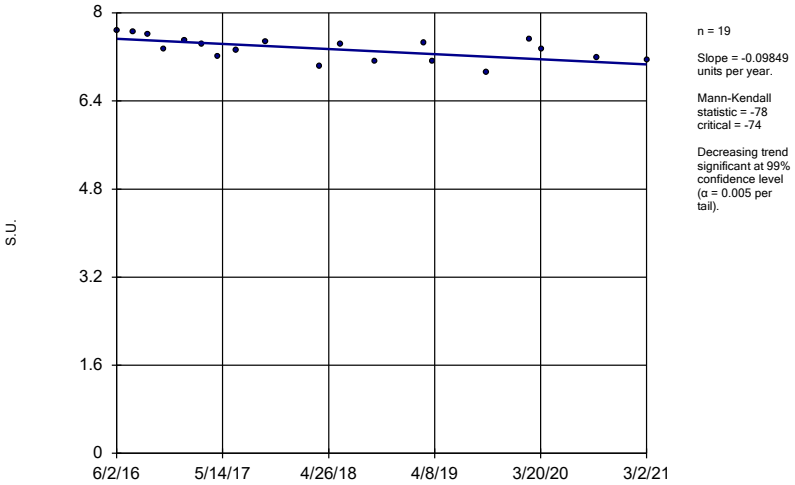
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 19

Slope = -0.09849 units per year.

Mann-Kendall statistic = -78
critical = -74

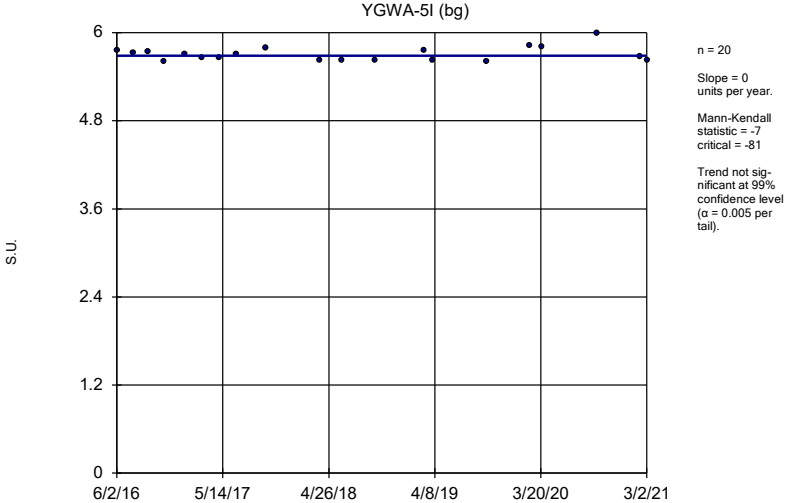
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -7
critical = -81

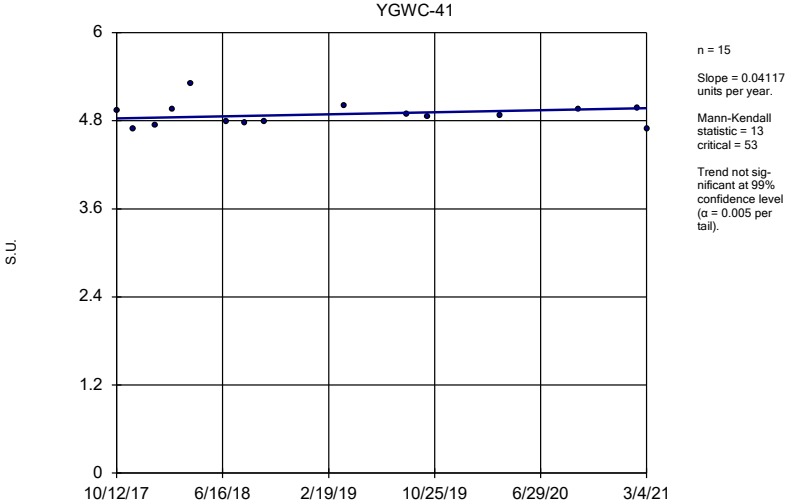
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-41



n = 15

Slope = 0.04117 units per year.

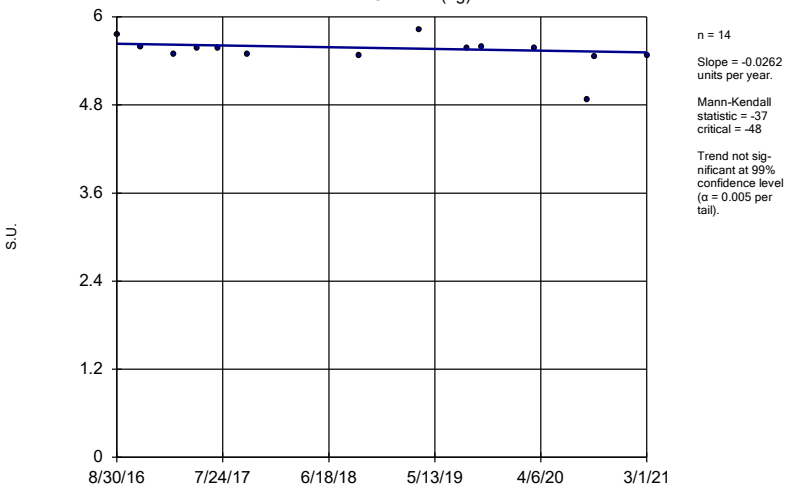
Mann-Kendall statistic = 13
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:50 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -0.0262 units per year.

Mann-Kendall statistic = -37
critical = -48

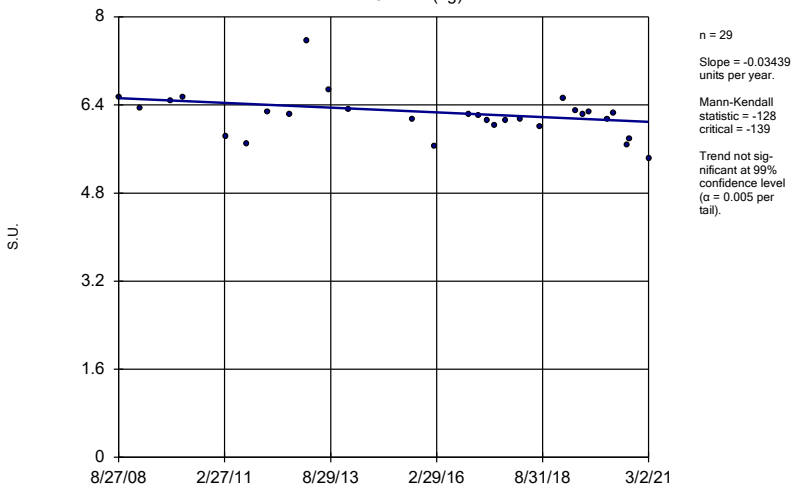
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 29

Slope = -0.03439 units per year.

Mann-Kendall statistic = -128
critical = -139

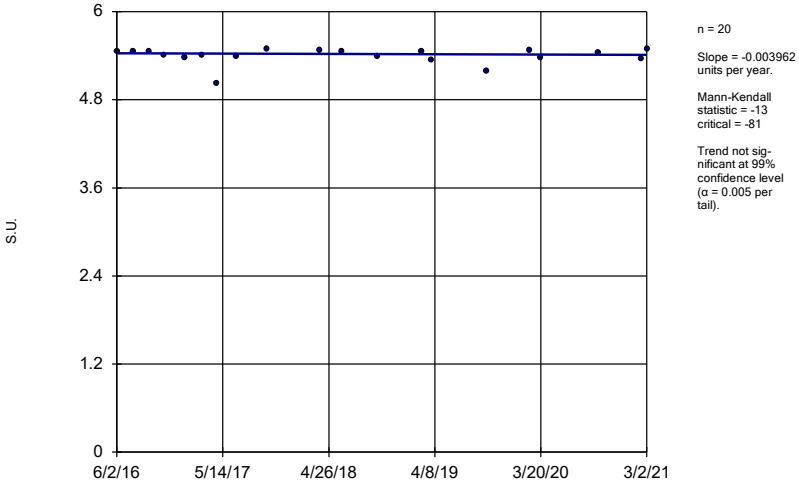
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 20

Slope = -0.003962 units per year.

Mann-Kendall statistic = -13
critical = -81

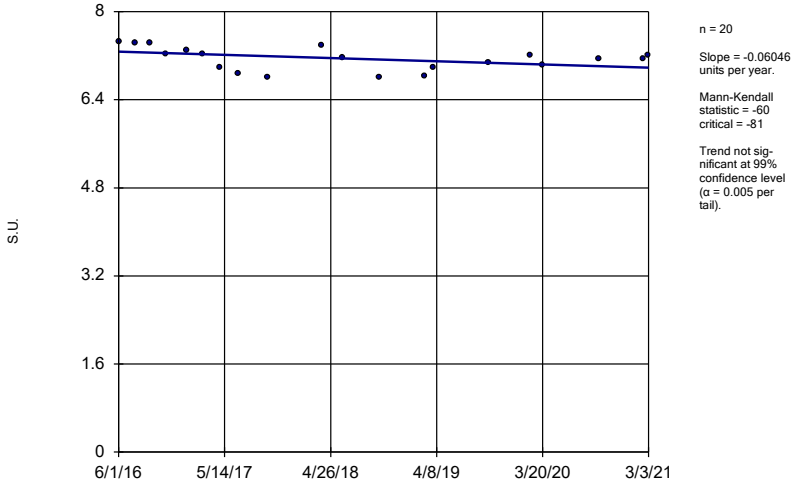
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 20

Slope = -0.06046 units per year.

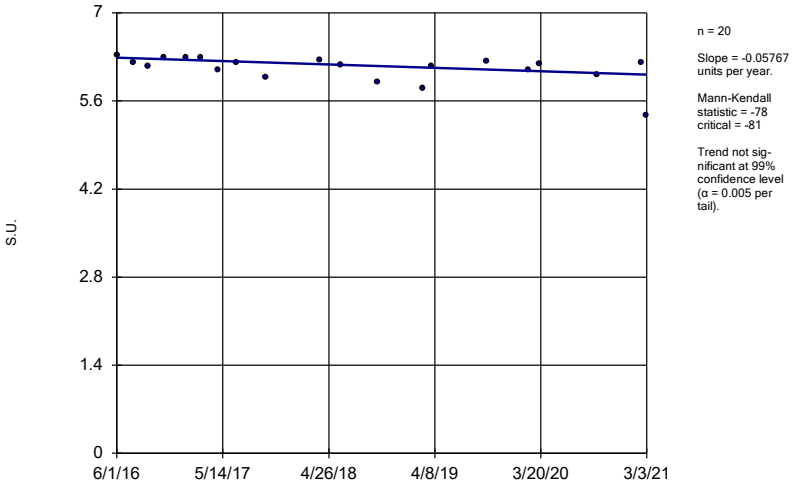
Mann-Kendall statistic = -60
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-1I (bg)



n = 20

Slope = -0.05767 units per year.

Mann-Kendall statistic = -78
critical = -81

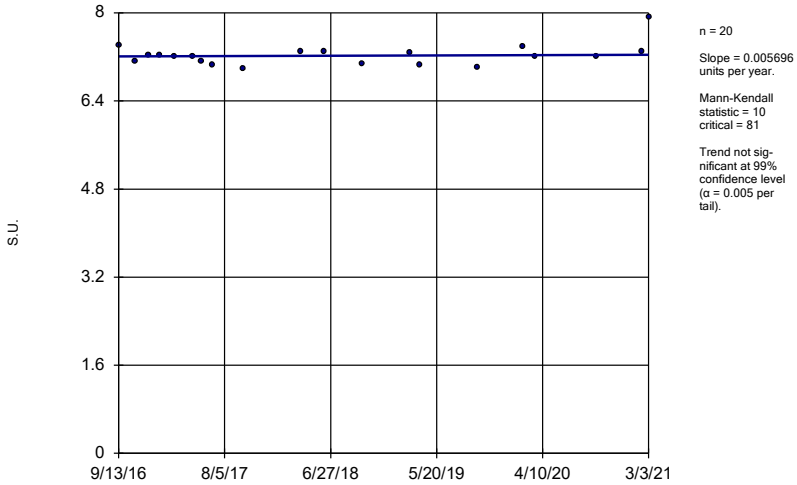
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 20

Slope = 0.005696 units per year.

Mann-Kendall statistic = 10
critical = 81

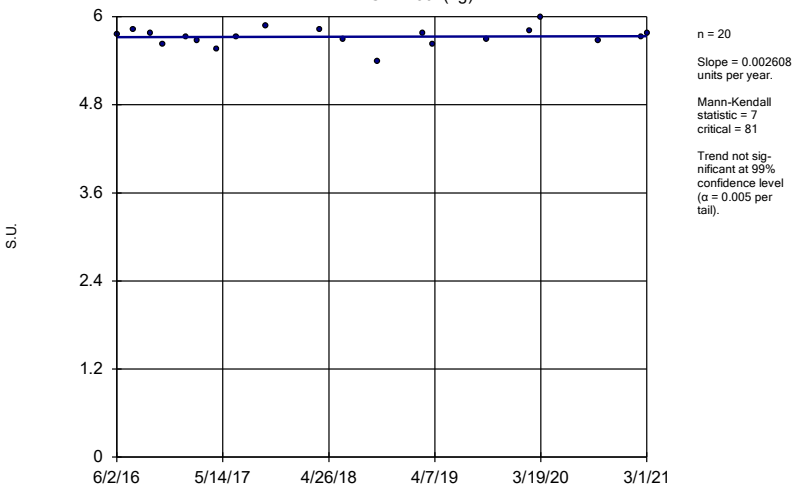
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 20

Slope = 0.002608 units per year.

Mann-Kendall statistic = 7
critical = 81

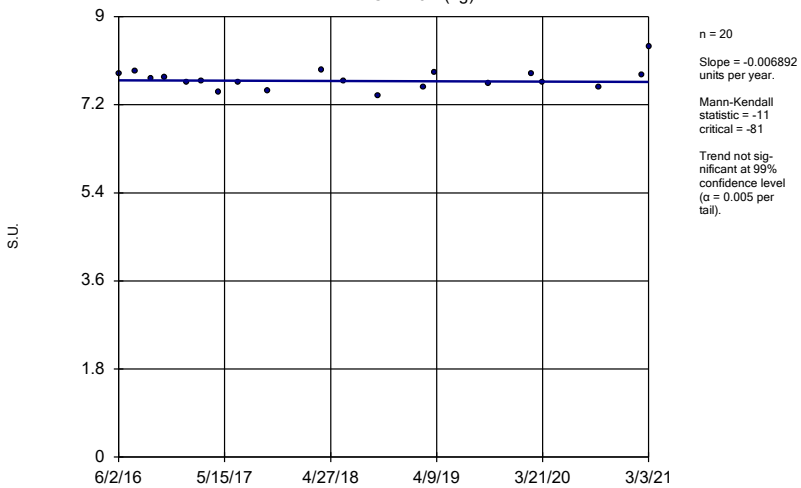
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 20

Slope = -0.006892 units per year.

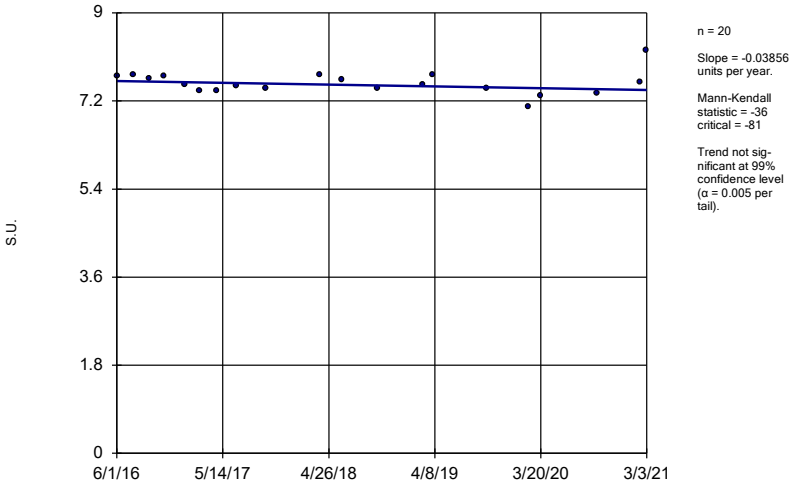
Mann-Kendall statistic = -11
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3I (bg)



n = 20

Slope = -0.03856 units per year.

Mann-Kendall statistic = -36 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

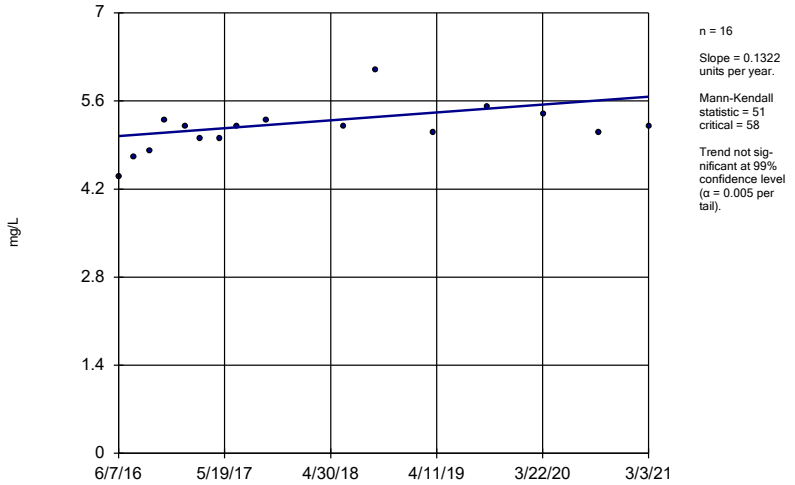
Constituent: pH Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 0.1322 units per year.

Mann-Kendall statistic = 51 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

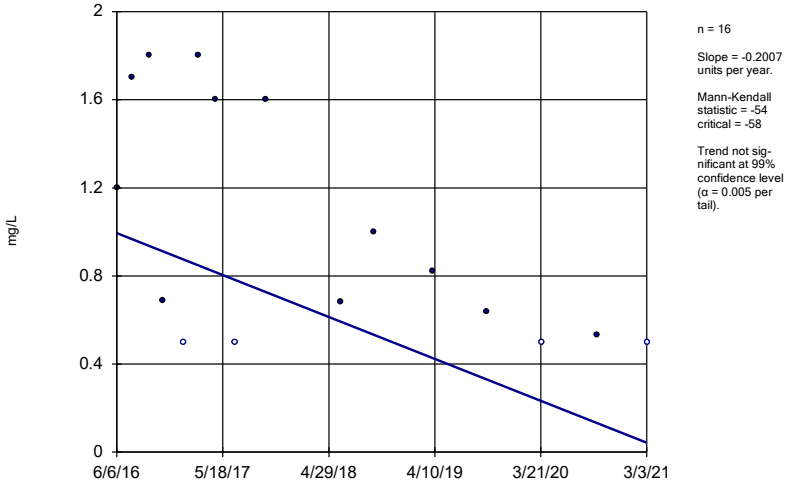
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = -0.2007 units per year.

Mann-Kendall statistic = -54 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

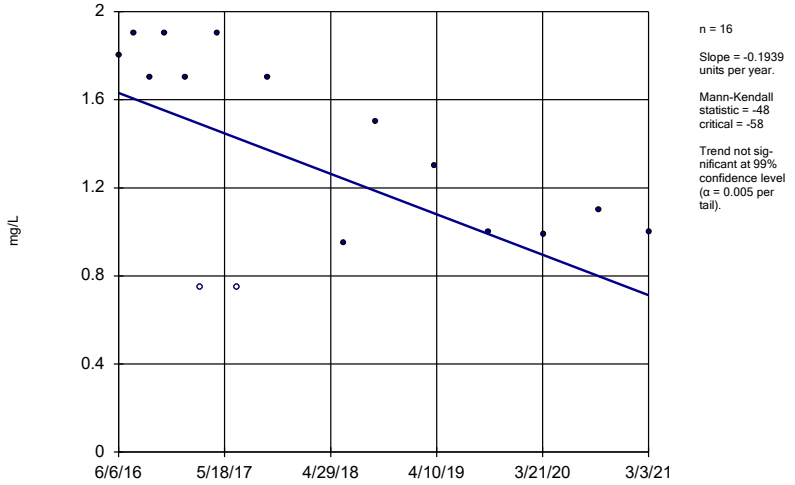
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = -0.1939 units per year.

Mann-Kendall statistic = -48 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

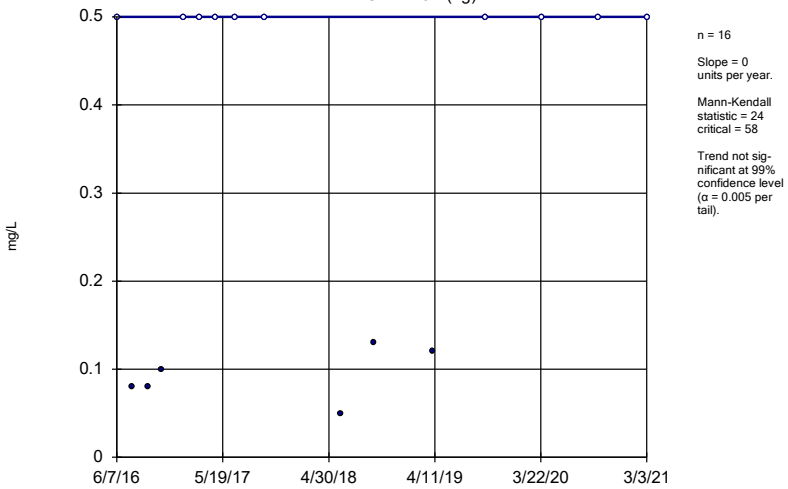
Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 24
critical = 58

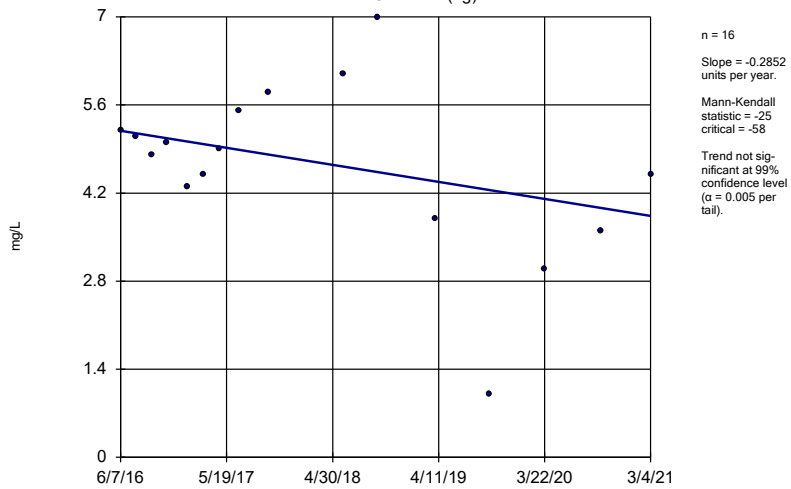
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = -0.2852 units per year.

Mann-Kendall statistic = -25
critical = -58

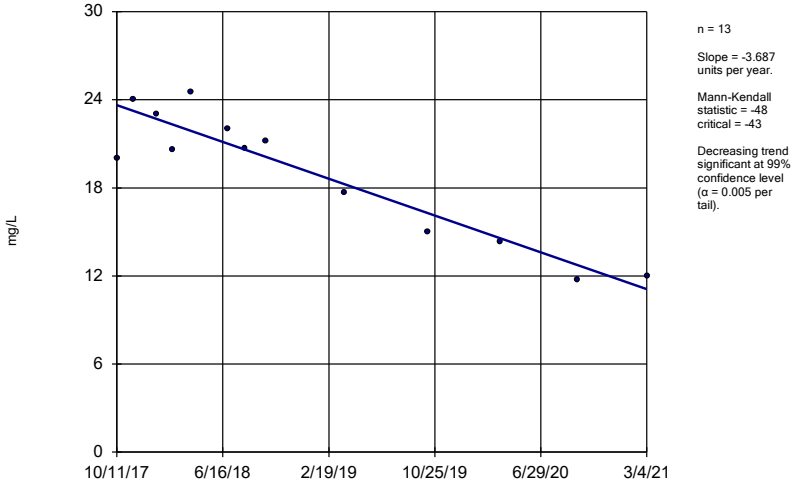
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = -3.687 units per year.

Mann-Kendall statistic = -48
critical = -43

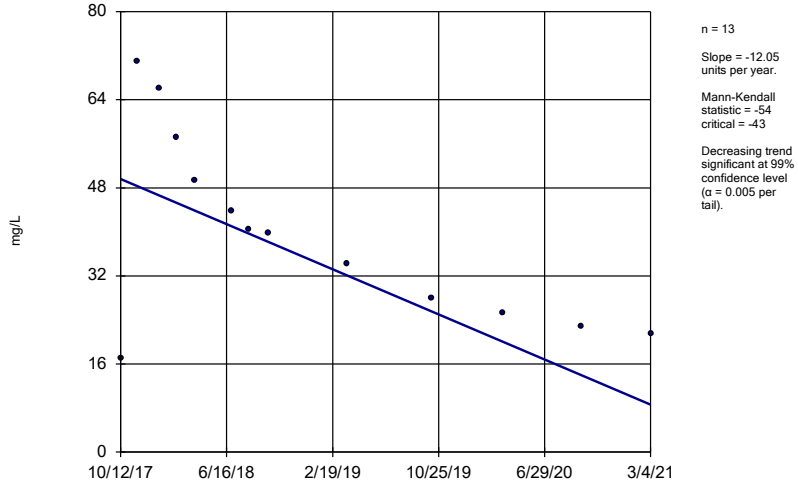
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -12.05 units per year.

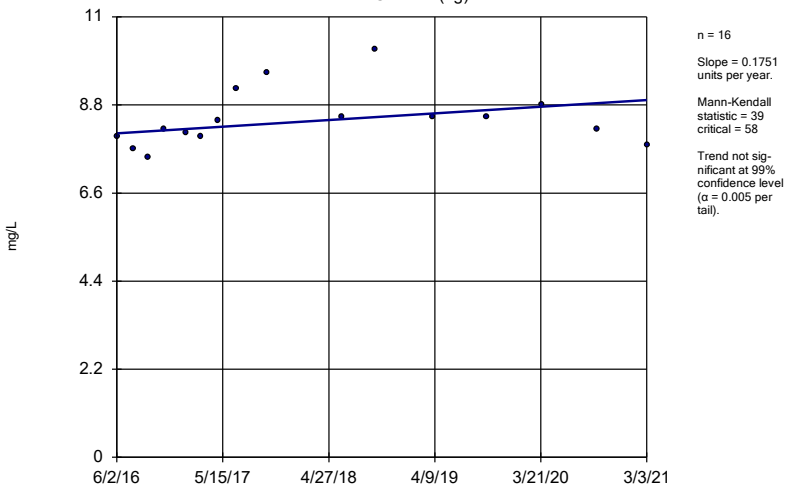
Mann-Kendall statistic = -54
critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 0.1751 units per year.

Mann-Kendall statistic = 39
critical = 58

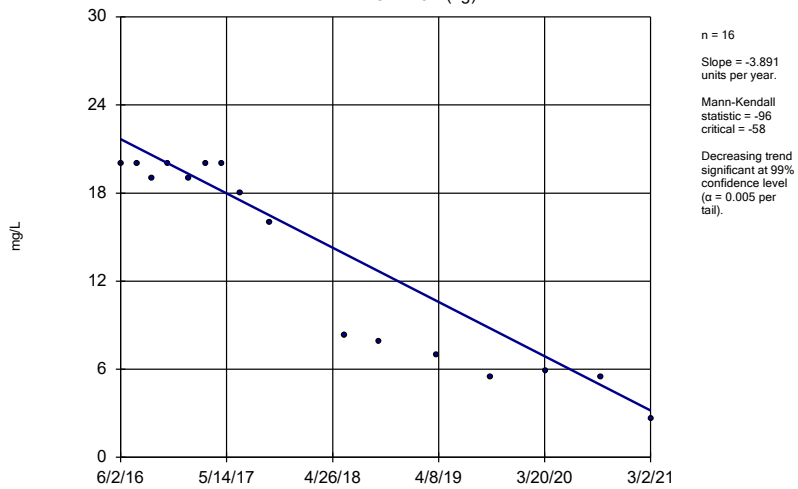
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -3.891 units per year.

Mann-Kendall statistic = -96
critical = -58

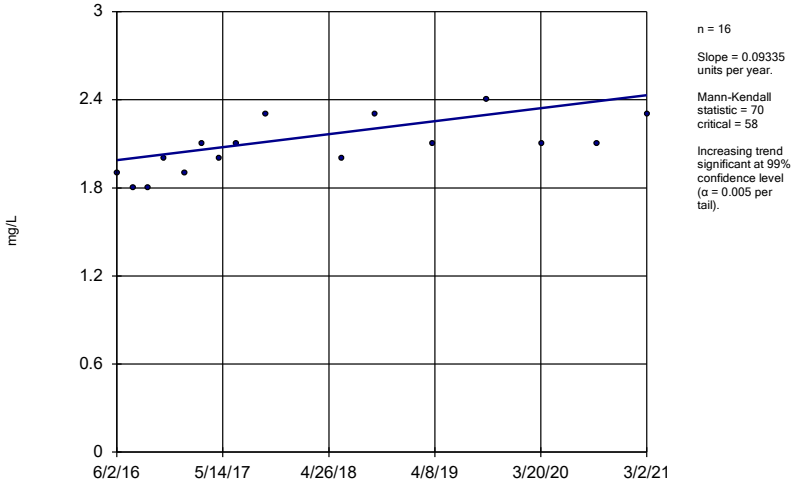
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = 0.09335 units per year.

Mann-Kendall statistic = 70
critical = 58

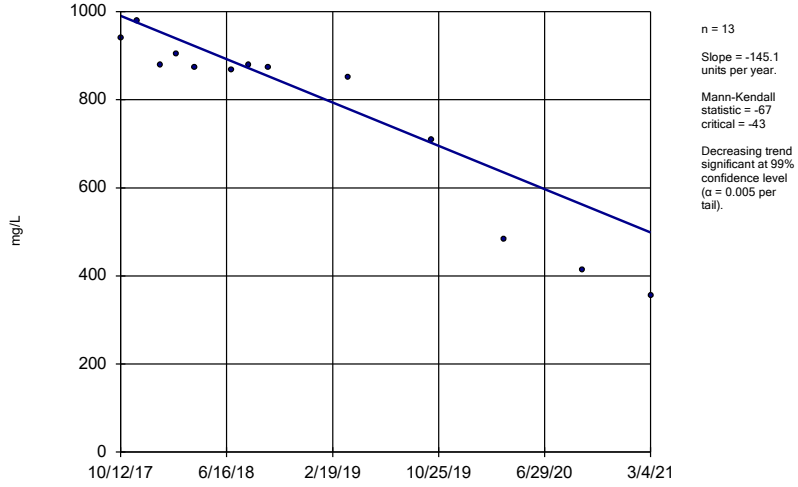
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 13

Slope = -145.1 units per year.

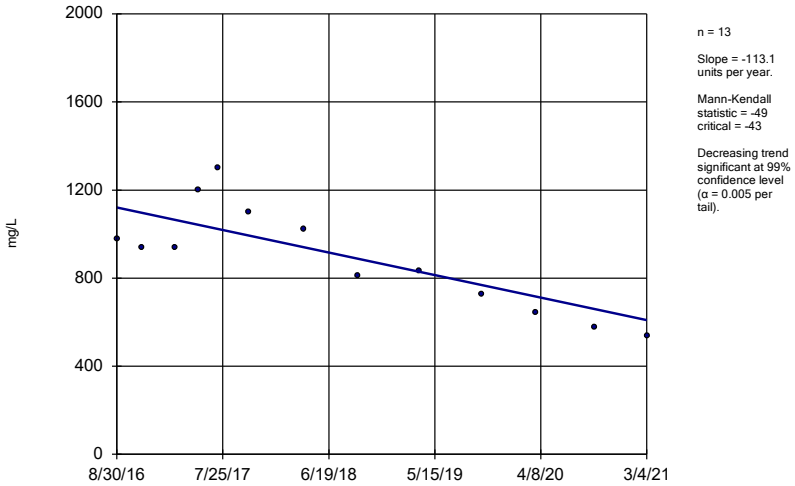
Mann-Kendall statistic = -67
critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-42



n = 13

Slope = -113.1 units per year.

Mann-Kendall statistic = -49
critical = -43

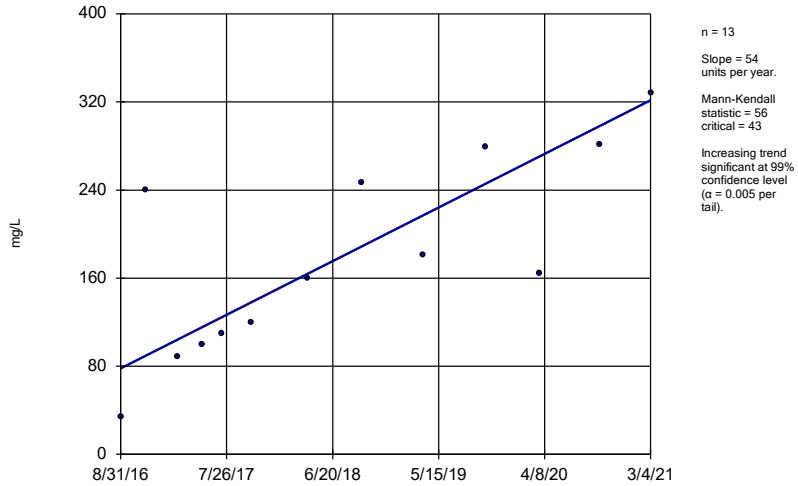
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 13

Slope = 54 units per year.

Mann-Kendall statistic = 56
critical = 43

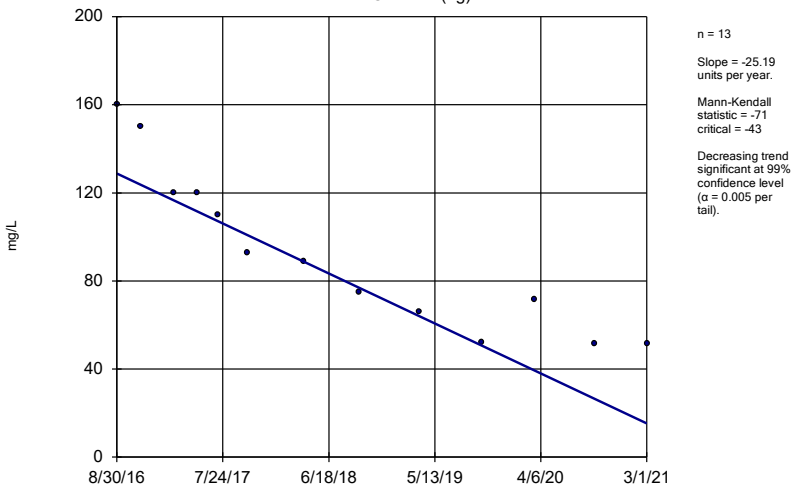
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -25.19 units per year.

Mann-Kendall statistic = -71
critical = -43

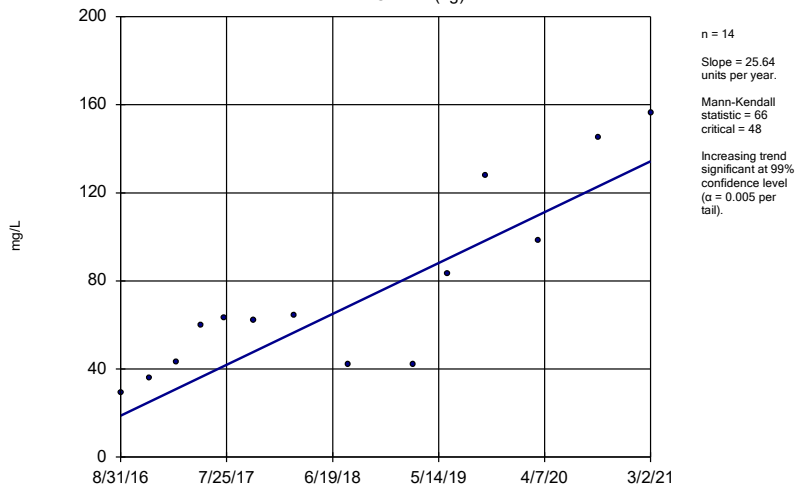
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 25.64 units per year.

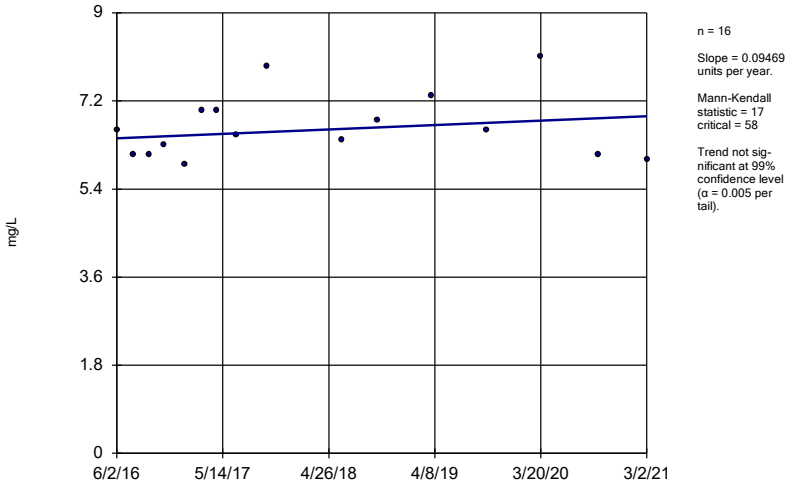
Mann-Kendall statistic = 66
critical = 48

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = 0.09469 units per year.

Mann-Kendall statistic = 17
critical = 58

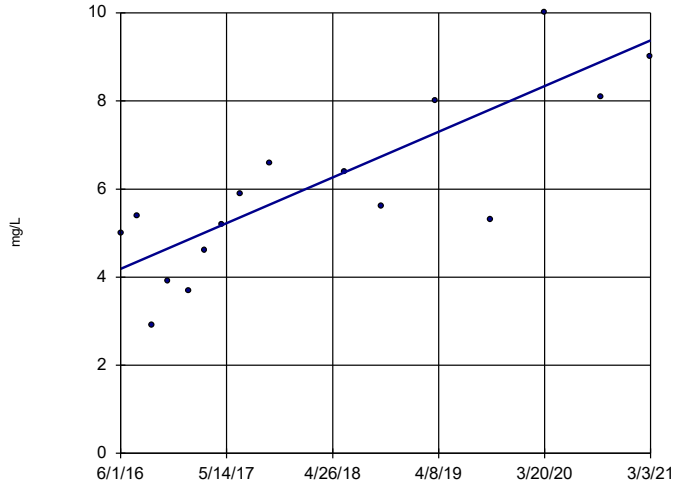
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 1.091 units per year.

Mann-Kendall statistic = 76
critical = 58

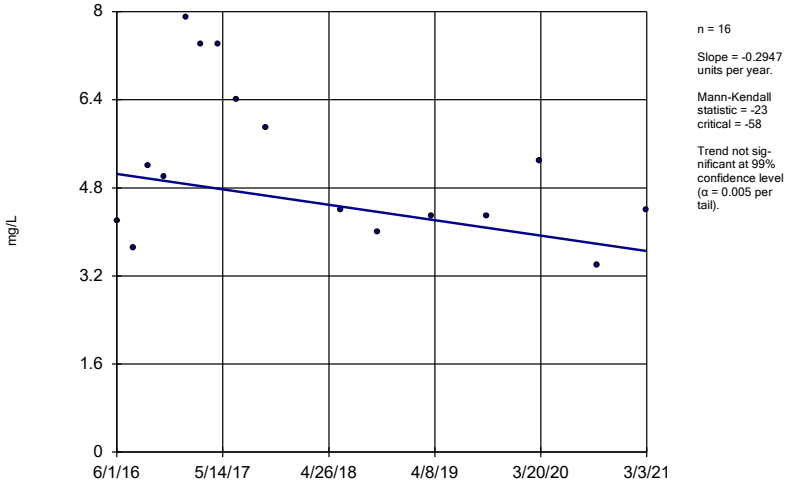
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -0.2947 units per year.

Mann-Kendall statistic = -23
critical = -58

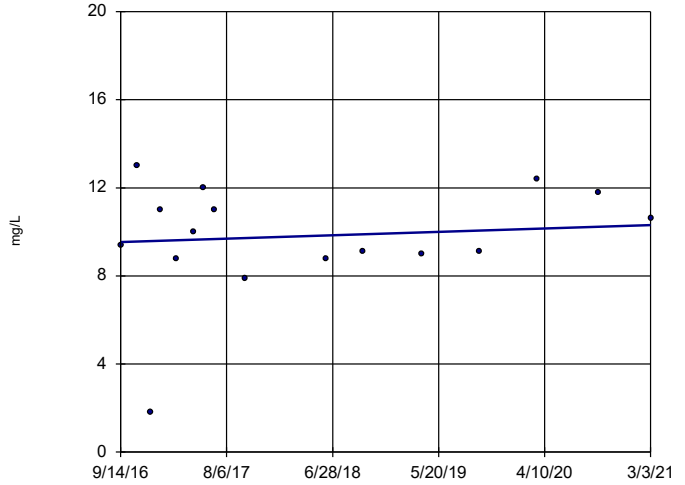
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = 0.1728 units per year.

Mann-Kendall statistic = 11
critical = 58

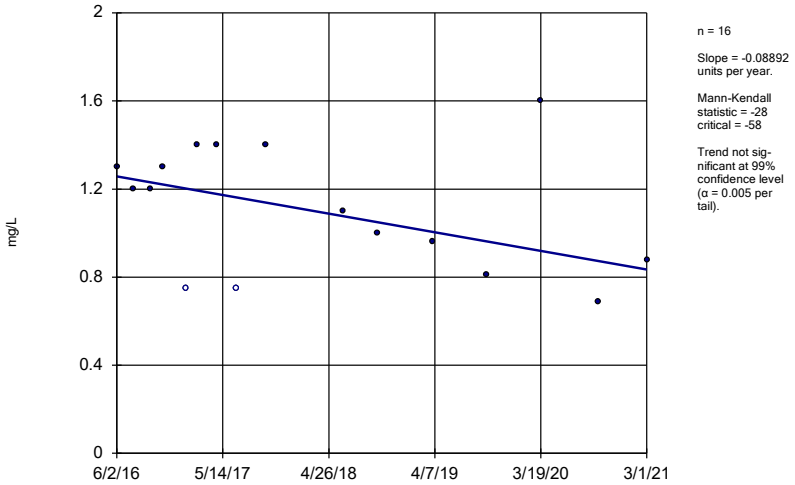
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = -0.08892 units per year.

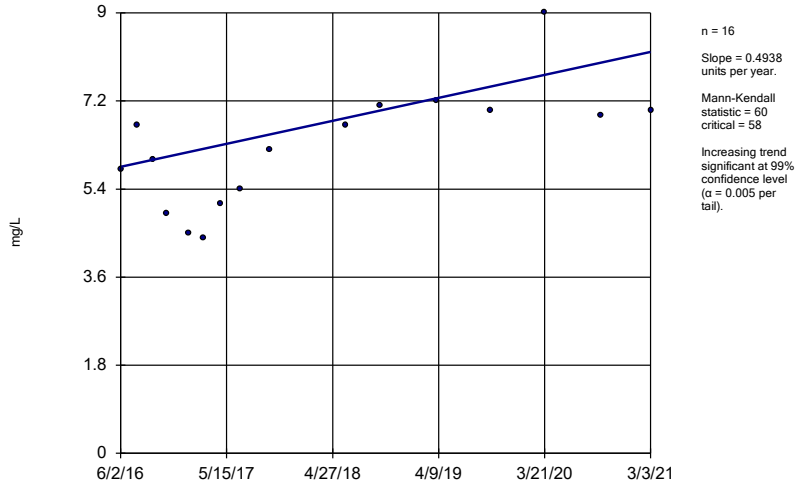
Mann-Kendall statistic = -28
critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 0.4938 units per year.

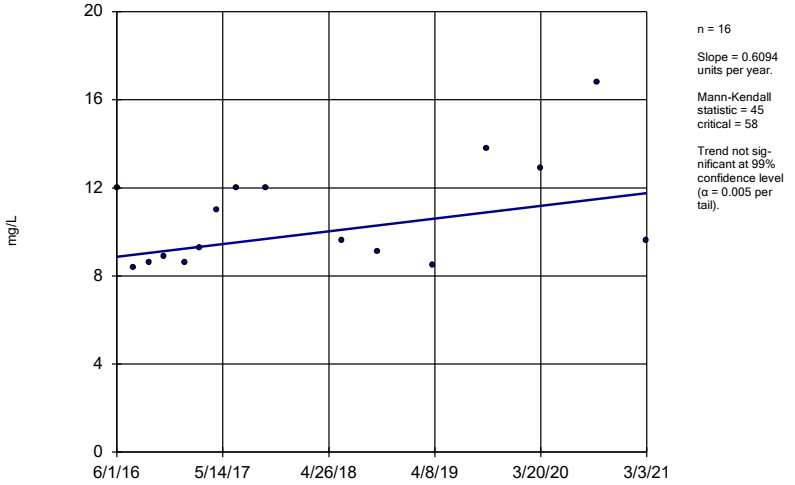
Mann-Kendall statistic = 60
critical = 58

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0.6094 units per year.

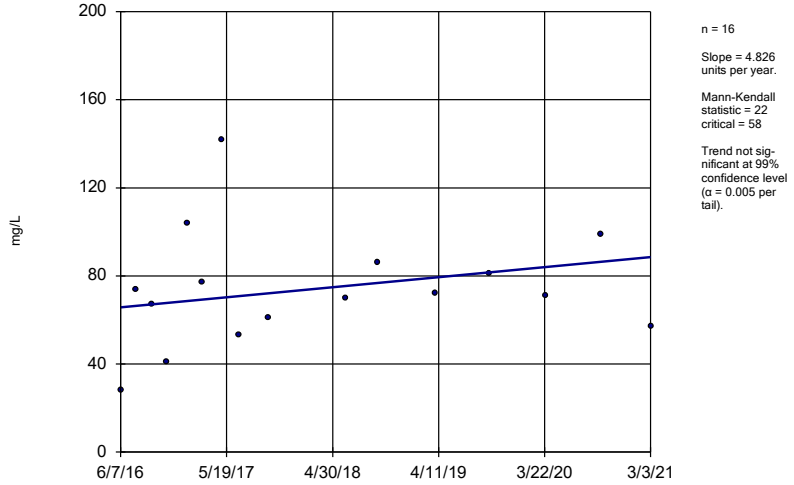
Mann-Kendall statistic = 45
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-17S (bg)



n = 16

Slope = 4.826 units per year.

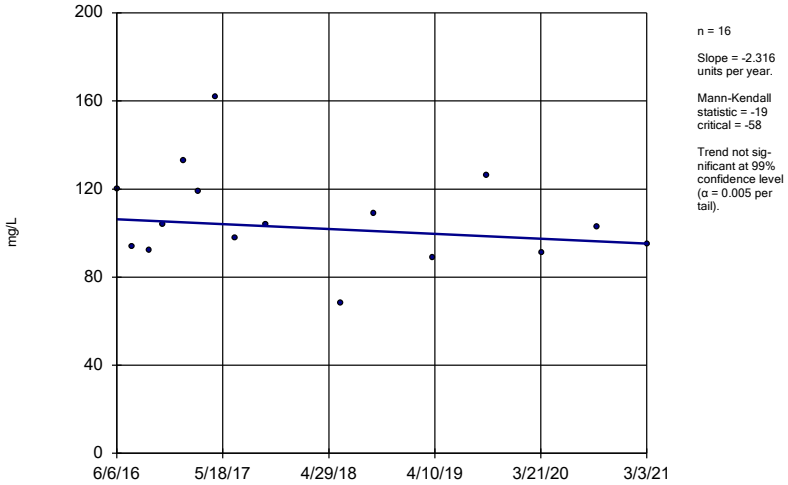
Mann-Kendall statistic = 22
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-18I (bg)



n = 16

Slope = -2.316 units per year.

Mann-Kendall statistic = -19 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

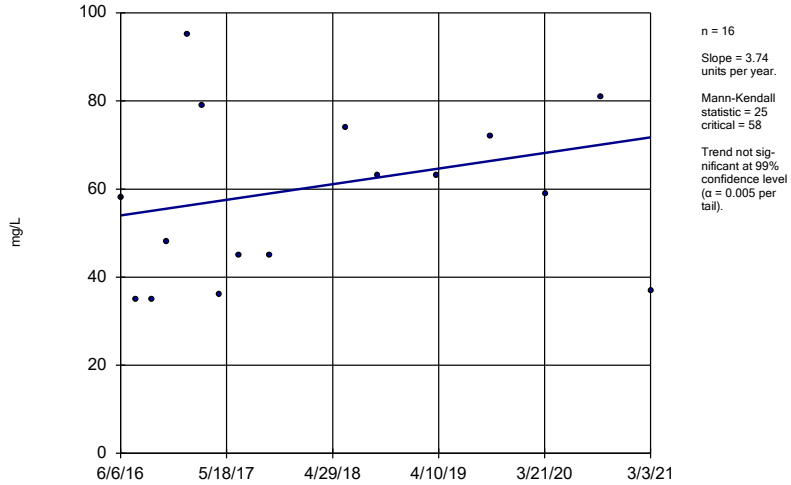
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 16

Slope = 3.74 units per year.

Mann-Kendall statistic = 25 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

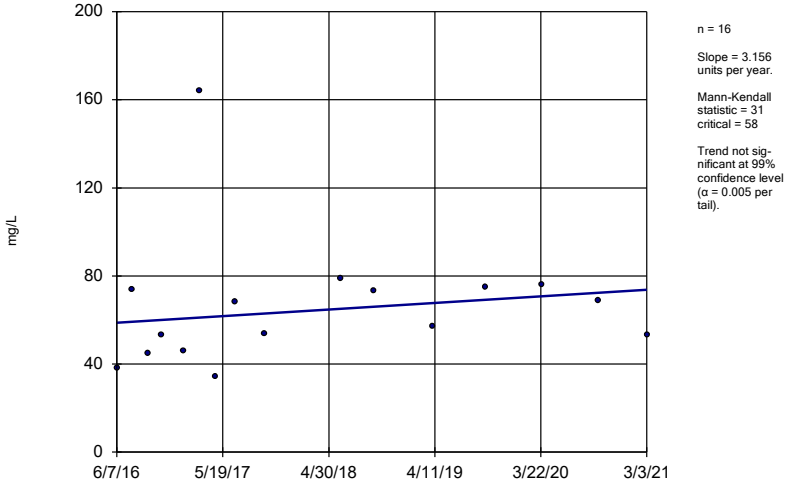
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 16

Slope = 3.156 units per year.

Mann-Kendall statistic = 31 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

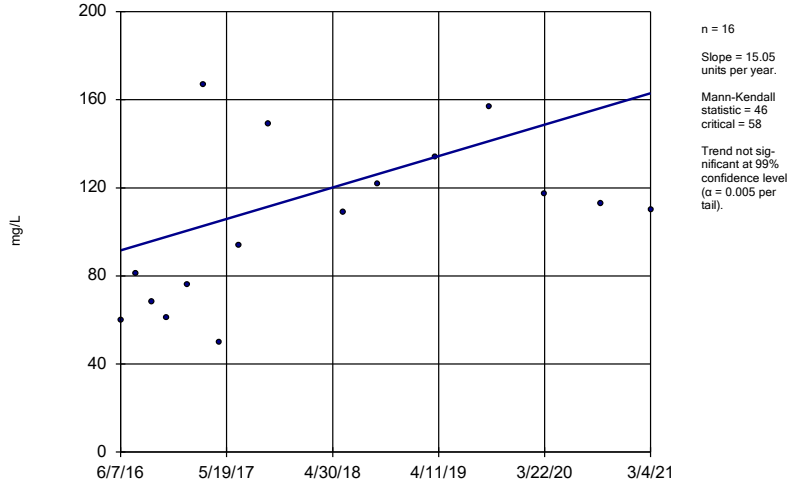
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 16

Slope = 15.05 units per year.

Mann-Kendall statistic = 46 critical = 58

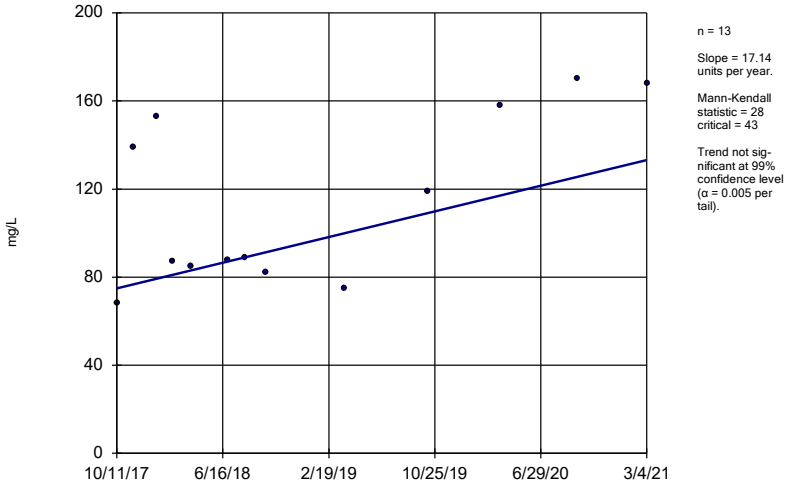
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-39 (bg)



n = 13

Slope = 17.14 units per year.

Mann-Kendall statistic = 28 critical = 43

Trend not significant at 99% confidence level (α = 0.005 per tail).

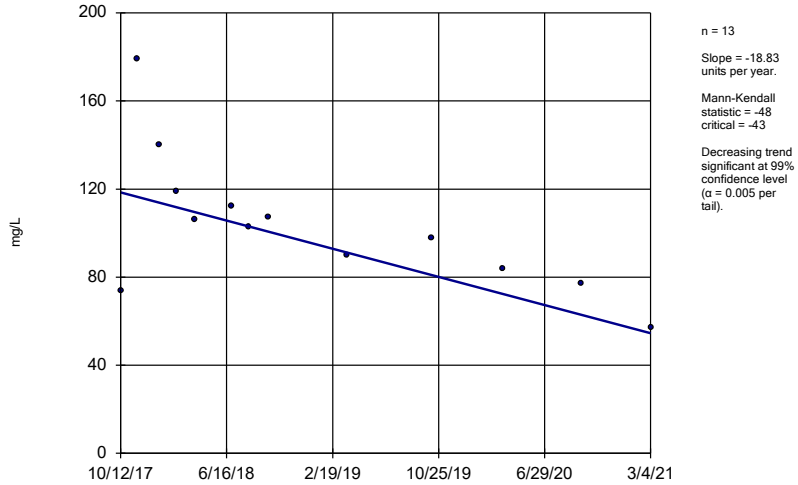
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 13

Slope = -18.83 units per year.

Mann-Kendall statistic = -48 critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

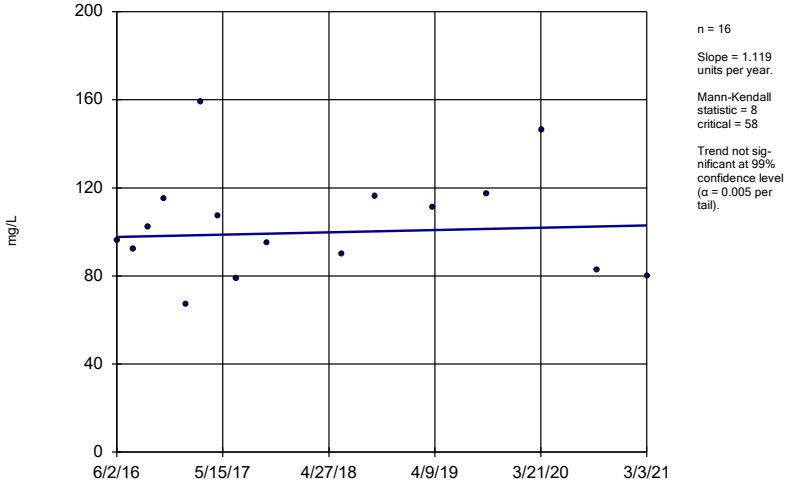
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 16

Slope = 1.119 units per year.

Mann-Kendall statistic = 8 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

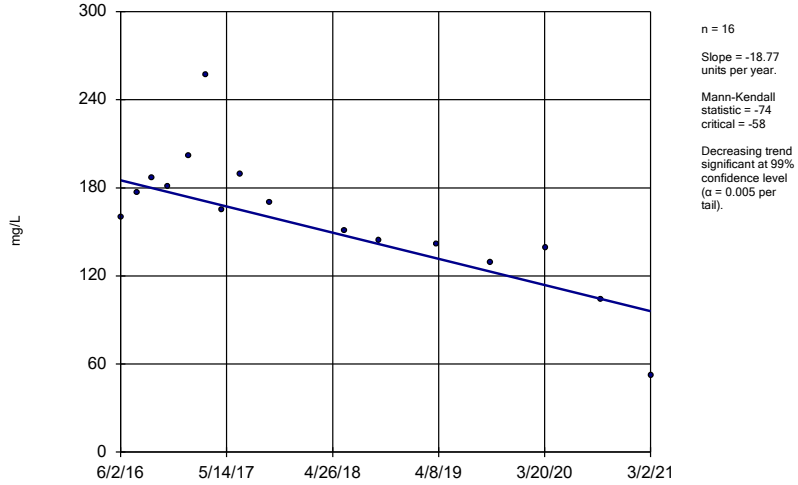
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 16

Slope = -18.77 units per year.

Mann-Kendall statistic = -74 critical = -58

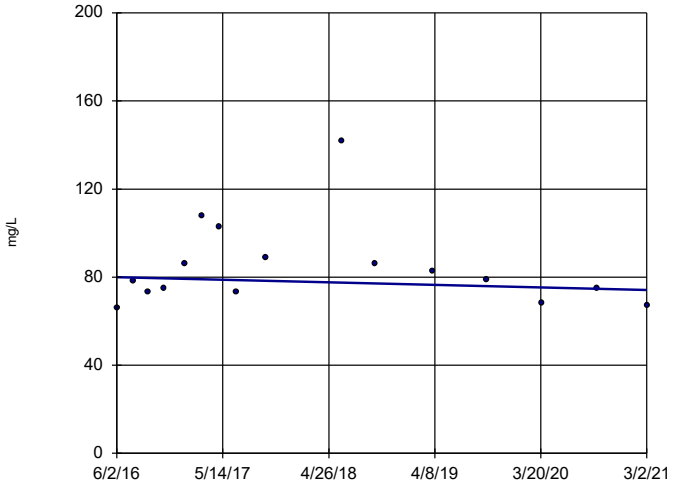
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-5I (bg)



n = 16

Slope = -1.204 units per year.

Mann-Kendall statistic = -7
critical = -58

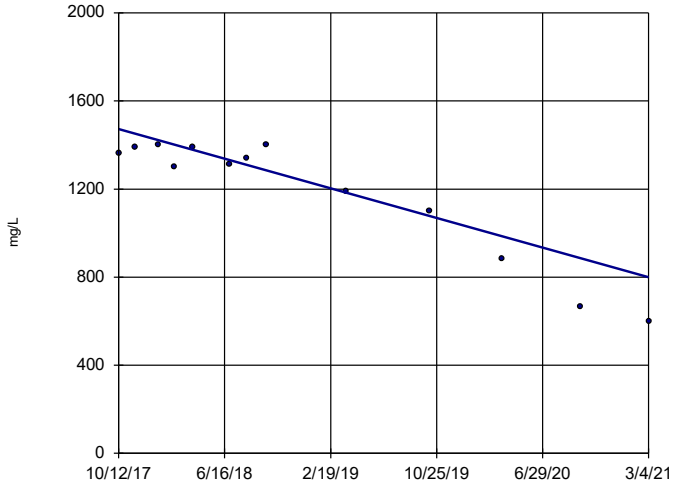
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 13

Slope = -198 units per year.

Mann-Kendall statistic = -48
critical = -43

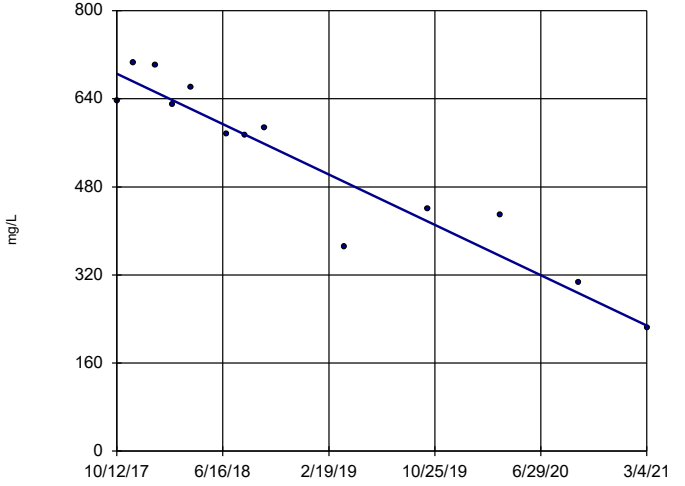
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-41



n = 13

Slope = -134.8 units per year.

Mann-Kendall statistic = -62
critical = -43

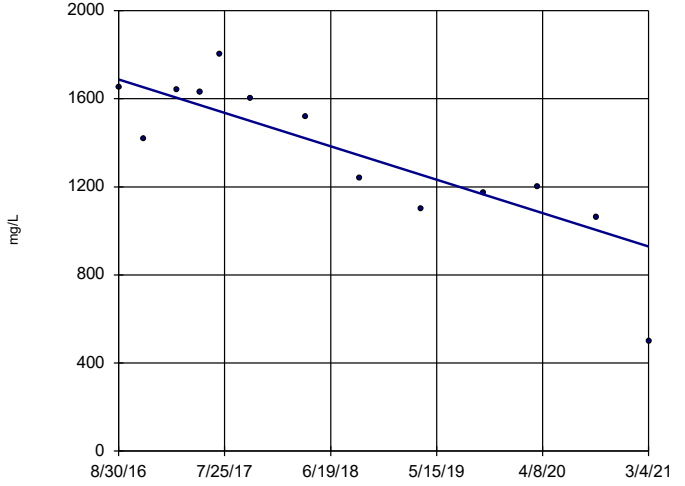
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 13

Slope = -168.3 units per year.

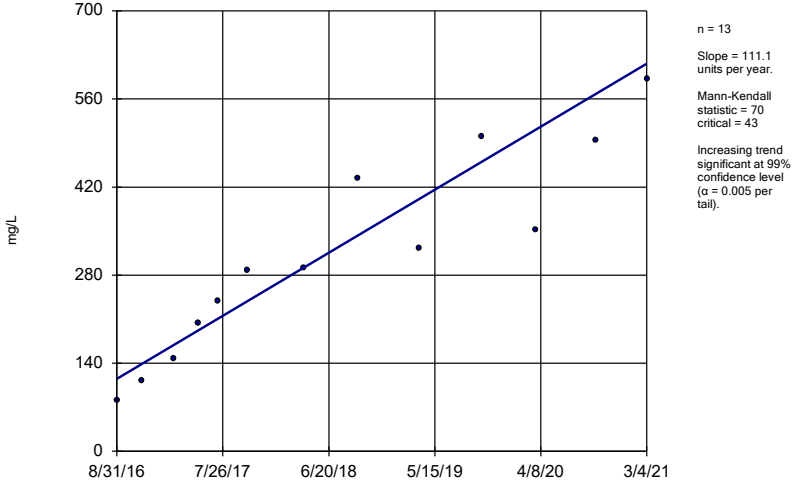
Mann-Kendall statistic = -56
critical = -43

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-43



n = 13

Slope = 111.1 units per year.

Mann-Kendall statistic = 70
critical = 43

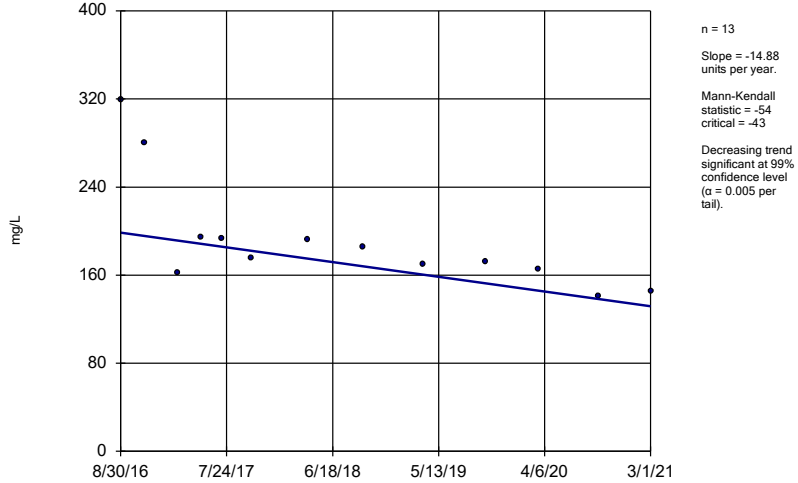
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = -14.88 units per year.

Mann-Kendall statistic = -54
critical = -43

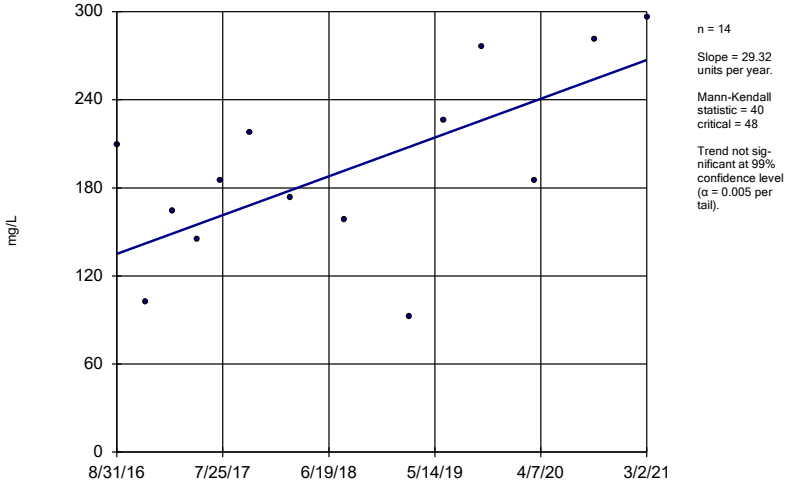
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 14

Slope = 29.32 units per year.

Mann-Kendall statistic = 40
critical = 48

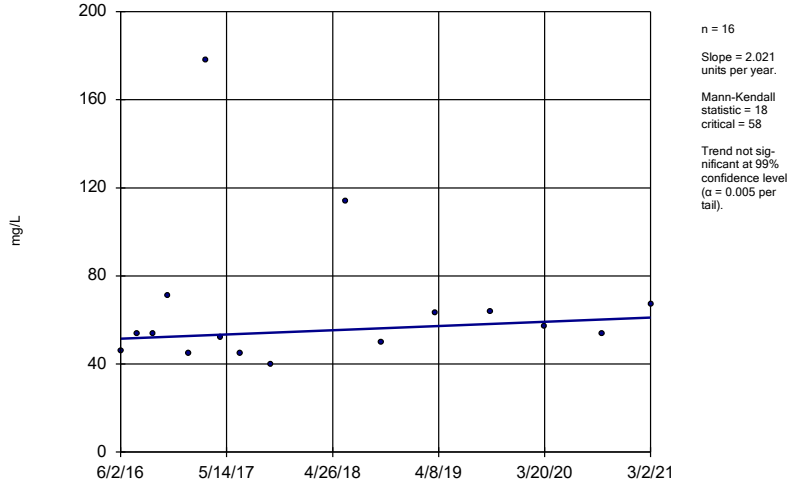
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 16

Slope = 2.021 units per year.

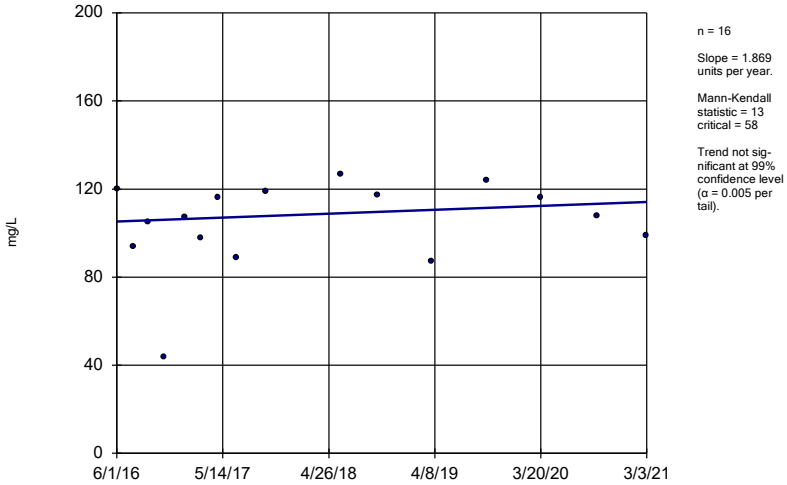
Mann-Kendall statistic = 18
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-1D (bg)



n = 16

Slope = 1.869 units per year.

Mann-Kendall statistic = 13
critical = 58

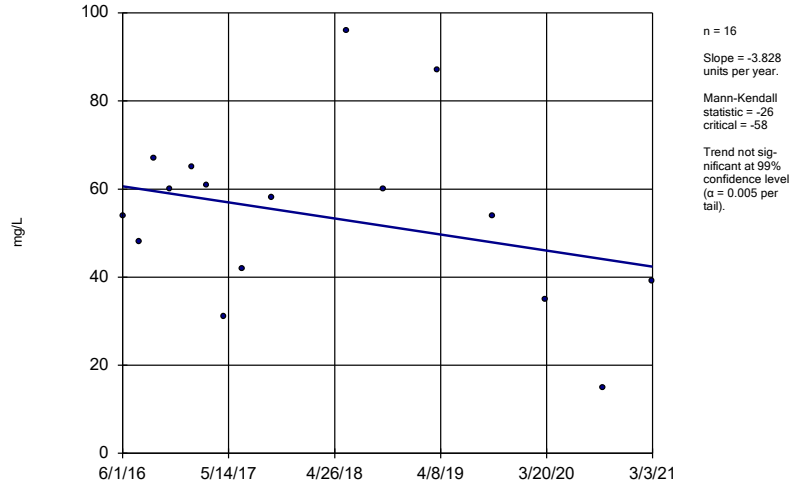
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 16

Slope = -3.828 units per year.

Mann-Kendall statistic = -26
critical = -58

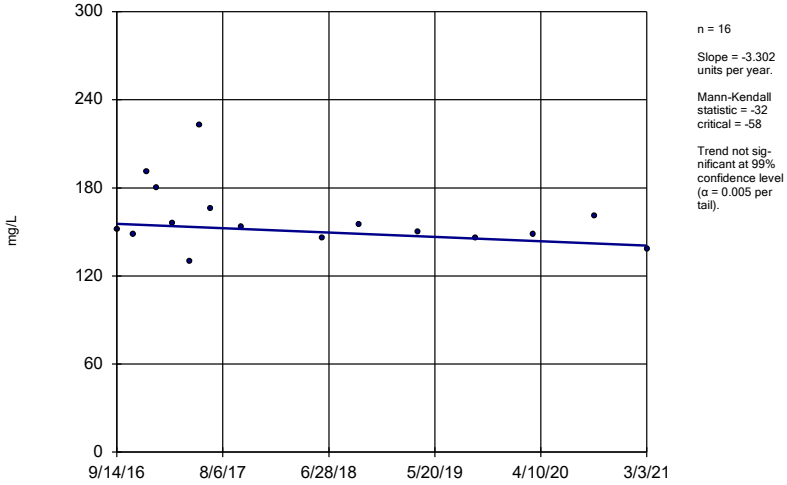
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 16

Slope = -3.302 units per year.

Mann-Kendall statistic = -32
critical = -58

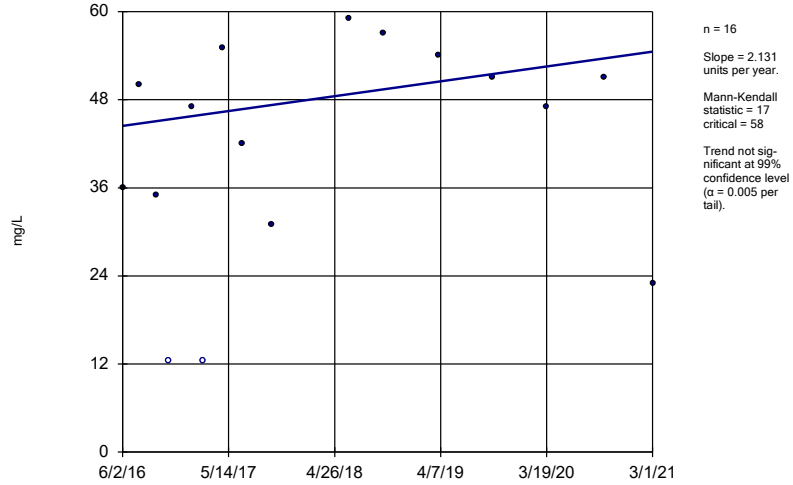
Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 16

Slope = 2.131 units per year.

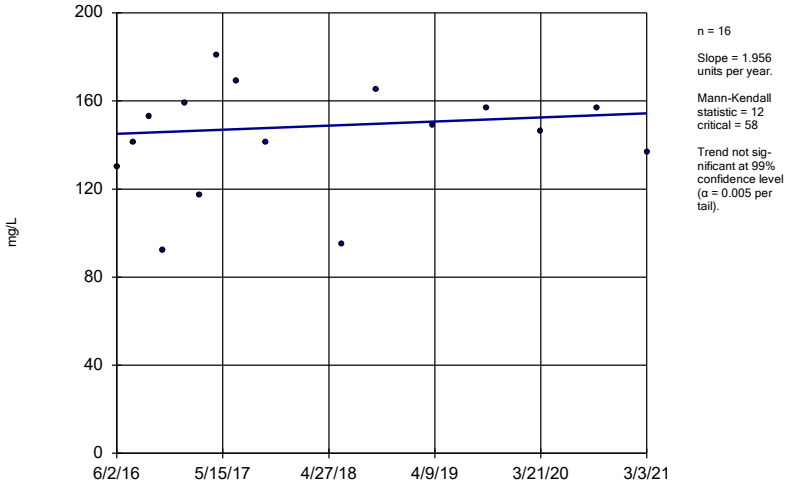
Mann-Kendall statistic = 17
critical = 58

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3D (bg)



n = 16

Slope = 1.956 units per year.

Mann-Kendall statistic = 12 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

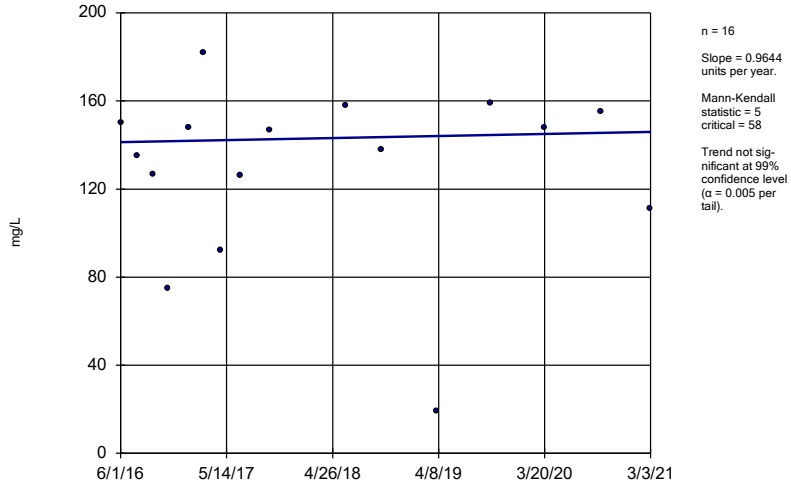
Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 16

Slope = 0.9644 units per year.

Mann-Kendall statistic = 5 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 5/6/2021 8:51 PM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

FIGURE F.

Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 8:57 PM

Constituent	Upper Lim.	Lower Lim.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	0.0047	n/a	n/a	315	n/a	n/a	86.03	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	0.005	n/a	n/a	363	n/a	n/a	77.96	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	0.071	n/a	n/a	363	n/a	n/a	3.03	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	81.27	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	0.0005	n/a	n/a	347	n/a	n/a	95.68	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	0.0093	n/a	n/a	315	n/a	n/a	77.46	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	0.035	n/a	n/a	360	n/a	n/a	69.72	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	6.92	n/a	n/a	342	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	0.68	n/a	n/a	362	n/a	n/a	68.51	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	0.0013	n/a	n/a	317	n/a	n/a	82.65	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	0.03	n/a	n/a	342	n/a	n/a	27.49	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	0.0002	n/a	n/a	278	n/a	n/a	93.17	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	0.014	n/a	n/a	306	n/a	n/a	59.8	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	0.005	n/a	n/a	345	n/a	n/a	91.59	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	0.001	n/a	n/a	298	n/a	n/a	96.64	n/a	n/a	NaN	NP Inter(NDs)

FIGURE G.

YATES AMA-R6 GWPS					
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**Federal GWPS**	**State GWPS**
Antimony, Total (mg/L)	0.006		0.0047	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01
Barium, Total (mg/L)	2		0.071	2	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Federal Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.025	0.00037	0.006	No	5	0.006874	0.0102	60	None	No	0.031	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	16	0.002541	0.0009916	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00061	0.006	No	13	0.002312	0.001105	69.23	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	13	0.002877	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	13	0.00281	0.0006851	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	13	0.002793	0.0007461	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	13	0.002664	0.0008287	84.62	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	5	0.002478	0.001167	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	11	0.002614	0.0008911	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	16	0.002869	0.000525	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	16	0.004256	0.006491	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	18	0.004789	0.0008957	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00212	0.0007623	0.01	No	14	0.001676	0.001497	14.29	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	14	0.00288	0.002208	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003139	0.00143	0.01	No	14	0.002355	0.001306	14.29	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	14	0.004086	0.001819	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	13	0.004035	0.001835	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	6	0.003608	0.002158	66.67	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	11	0.002504	0.001995	36.36	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	18	0.004806	0.000825	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	18	0.004041	0.001847	77.78	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.04981	0.02919	2	No	6	0.0395	0.007503	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04499	0.02913	2	No	18	0.03706	0.01311	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.0239	0.01832	2	No	14	0.02111	0.003941	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03029	0.0206	2	No	14	0.02544	0.00684	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04675	0.03191	2	No	14	0.03933	0.01047	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03572	0.01774	2	No	14	0.02673	0.01269	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07999	0.06987	2	No	13	0.07493	0.006807	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.063	0.032	2	No	6	0.04	0.01166	0	None	No	0.0155	NP (normality)
Barium (mg/L)	PZ-37	0.05778	0.04078	2	No	11	0.04928	0.0102	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	18	0.02053	0.003411	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04411	0.03184	2	No	18	0.03797	0.01014	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	6	0.0004047	0.0001776	66.67	None	No	0.0155	NP (NDs)
Beryllium (mg/L)	YAMW-5	0.0002156	0.00005244	0.004	No	4	0.000134	0.00003593	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	18	0.0002109	0.0001859	27.78	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.002	0.004	No	14	0.003	0.000862	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.000067	0.004	No	14	0.0003503	0.0002087	64.29	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.0003	0.004	No	14	0.0004286	0.000133	42.86	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	13	0.0001408	0.0001088	7.692	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004361	0.0002224	0.004	No	7	0.0003871	0.0001188	28.57	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003331	0.0002091	0.004	No	11	0.0003355	0.0001069	18.18	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	18	0.0001811	0.000149	16.67	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.0003195	0.0001904	0.004	No	18	0.0002549	0.0001067	5.556	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	6	0.0003233	0.000194	50	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	18	0.0004761	0.0001014	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002798	0.002139	0.005	No	14	0.00235	0.0006149	0	None	x^4	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	14	0.0002886	0.0001446	28.57	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.00017	0.005	No	14	0.0003764	0.0001667	42.86	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	13	0.0004669	0.0001193	92.31	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	6	0.0004433	0.0001388	83.33	None	No	0.0155	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006329	0.0002453	0.005	No	11	0.0004727	0.0002328	18.18	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	18	0.0002433	0.0001453	22.22	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.001163	0.0003768	0.1	No	4	0.00077	0.0001732	0	None	No	0.01	Param.
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	14	0.003296	0.002061	57.14	None	No	0.01	NP (NDs)

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	14	0.004368	0.001607	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	14	0.004671	0.001232	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	14	0.004095	0.001807	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	14	0.003755	0.002043	71.43	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	12	0.001958	0.0009839	8.333	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.0012	0.0006	0.1	No	4	0.0007775	0.0002852	0	None	No	0.0625	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	11	0.004055	0.001633	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	14	0.004153	0.001684	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	14	0.004034	0.001699	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02859	0.004268	0.035	No	7	0.01643	0.01106	28.57	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	14	0.003742	0.002072	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	14	0.0022	0.0008927	7.143	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	14	0.00325	0.001688	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	13	0.003654	0.002103	69.23	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	6	0.00515	0.0003674	83.33	None	No	0.0155	NP (NDs)
Cobalt (mg/L)	PZ-37	0.0129	0.004336	0.035	No	11	0.008618	0.005139	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	18	0.003761	0.002058	72.22	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.8723	0.2073	6.92	No	5	0.5398	0.1984	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8108	0.3587	6.92	No	18	0.5848	0.3736	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.326	0.5981	6.92	No	14	0.962	0.5138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.374	0.6299	6.92	No	14	1.032	0.5676	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.942	1.277	6.92	No	14	2.11	1.175	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	4.059	1.333	6.92	No	14	2.696	1.924	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.175	0.4779	6.92	No	13	0.8266	0.469	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	1.075	-0.04565	6.92	No	5	0.5146	0.3343	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.039	1.437	6.92	No	11	1.749	0.4126	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7865	0.4799	6.92	No	18	0.6332	0.2534	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.095	0.5456	6.92	No	18	0.8205	0.4544	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	19	0.09468	0.02023	84.21	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	15	0.1616	0.1178	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	15	0.1007	0.002582	86.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	15	0.08607	0.02601	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1159	0.05777	4	No	15	0.1069	0.05423	26.67	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.06	4	No	14	0.09929	0.02702	57.14	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	11	0.1773	0.1198	63.64	None	No	0.006	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	19	0.09637	0.01535	89.47	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	19	0.09242	0.03298	63.16	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.015	No	5	0.000838	0.0003622	80	None	No	0.031	NP (NDs)
Lead (mg/L)	YGWC-23S	0.001	0.00021	0.015	No	16	0.0008016	0.0003629	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.015	No	14	0.0008071	0.0003832	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.015	No	14	0.0007541	0.0004218	64.29	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.015	No	14	0.0007422	0.0004243	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.015	No	14	0.0008682	0.000335	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.015	No	13	0.0009276	0.000261	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.015	No	5	0.0006474	0.0004833	60	None	No	0.031	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.015	No	11	0.0006066	0.0004535	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.015	No	16	0.0009008	0.0002768	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.000658	0.0002358	0.015	No	16	0.0004956	0.0004239	12.5	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.0235	0.0006154	0.04	No	6	0.01255	0.008417	16.67	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.04	No	18	0.002994	0.003057	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008994	0.007591	0.04	No	14	0.008293	0.0009903	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0025	0.04	No	14	0.004314	0.003188	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.0478	0.02983	0.04	No	14	0.03881	0.01268	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01912	0.01164	0.04	No	14	0.01538	0.005279	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.04	No	13	0.003708	0.0002465	0	None	No	0.01	NP (normality)

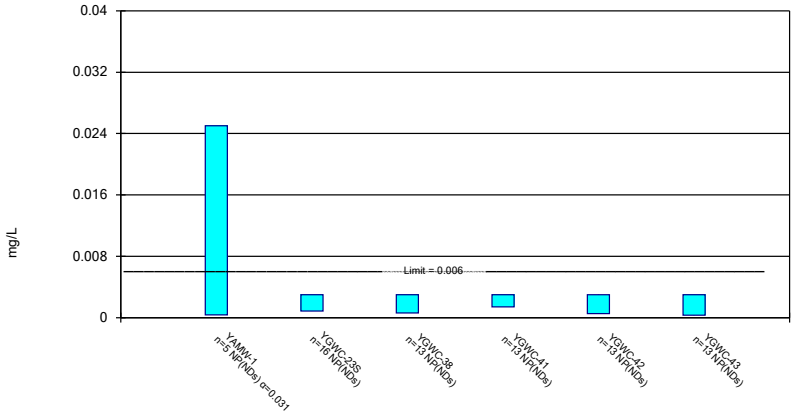
Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:17 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	PZ-35	0.015	0.001	0.04	No	6	0.005133	0.006226	16.67	None	No	0.0155	NP (normality)
Lithium (mg/L)	PZ-37	0.03042	0.02345	0.04	No	11	0.02679	0.004677	9.091	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006884	0.003471	0.04	No	18	0.005478	0.002992	5.556	None	x^(1/3)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	13	0.0001883	0.00003045	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	11	0.0001743	0.00005804	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.0002	0.002	No	11	0.0001862	0.00004583	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.0002	0.002	No	11	0.0001865	0.00004462	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	10	0.0001801	0.0000459	80	None	No	0.011	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004895	0.001572	0.1	No	4	0.004925	0.003462	25	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00094	0.1	No	14	0.00525	0.004314	42.86	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0011	0.1	No	14	0.005679	0.004493	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.1	No	12	0.009225	0.002685	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.1	No	4	0.007975	0.00405	75	None	No	0.0625	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0016	0.1	No	11	0.004818	0.004118	36.36	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.1	No	14	0.007071	0.003747	57.14	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.0025	0.0019	0.05	No	6	0.0024	0.0002449	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	YAMW-4	0.016	0.0018	0.05	No	4	0.0057	0.006875	50	None	No	0.0625	NP (normality)
Selenium (mg/L)	YAMW-5	0.08521	0.01079	0.05	No	4	0.048	0.01639	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.03964	0.02677	0.05	No	18	0.03321	0.01064	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06577	0.04363	0.05	No	14	0.0547	0.01563	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05735	0.04038	0.05	No	14	0.04886	0.01198	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00899	0.006583	0.05	No	13	0.007646	0.00198	7.692	None	x^2	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002744	0.001829	0.05	No	18	0.002433	0.0005931	33.33	Kaplan-Meier	No	0.01	Param.

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

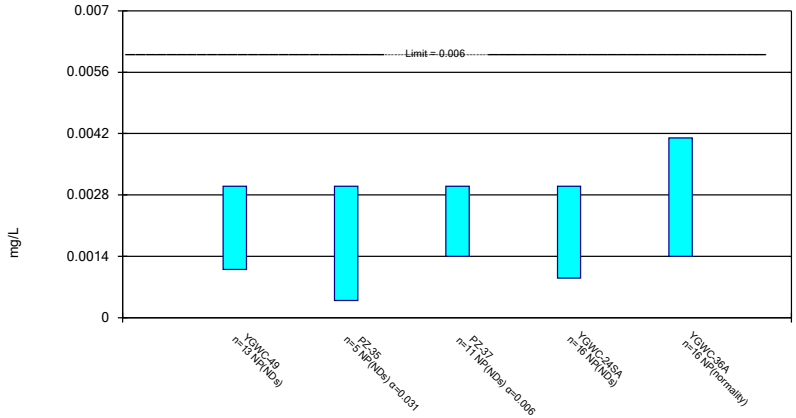


Constituent: Antimony Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

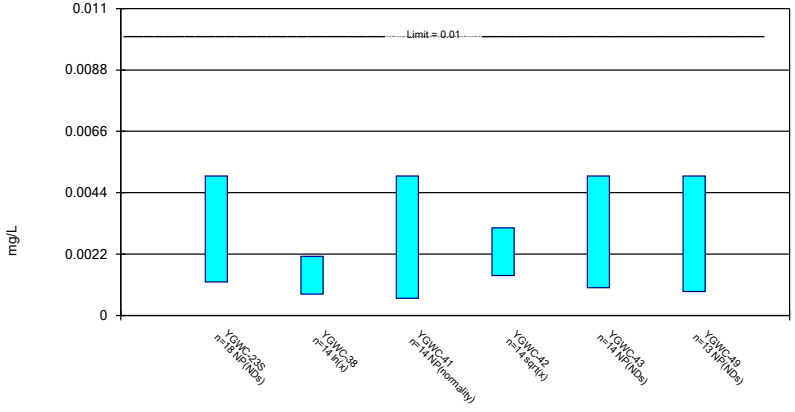


Constituent: Antimony Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

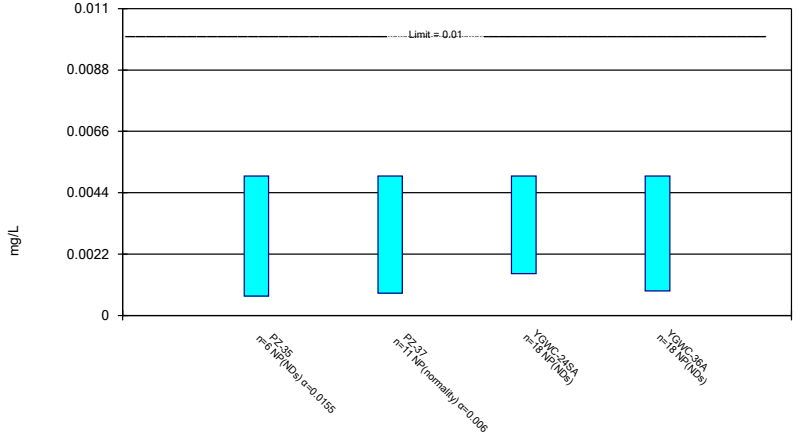


Constituent: Arsenic Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

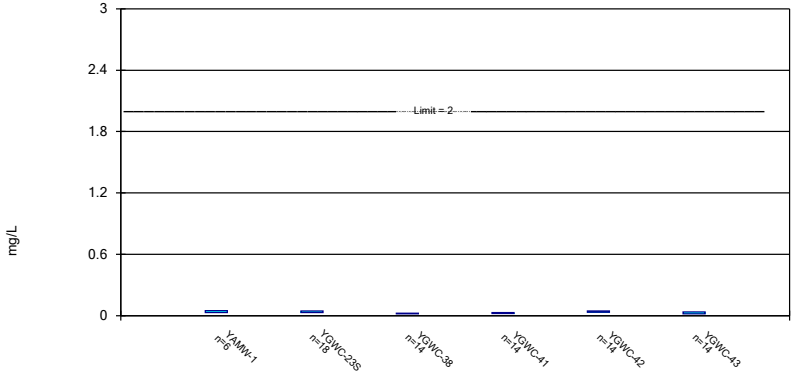
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Arsenic Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric Confidence Interval

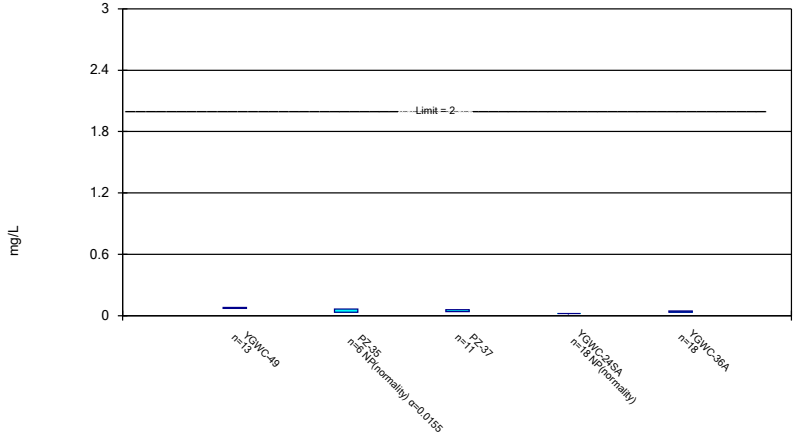
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

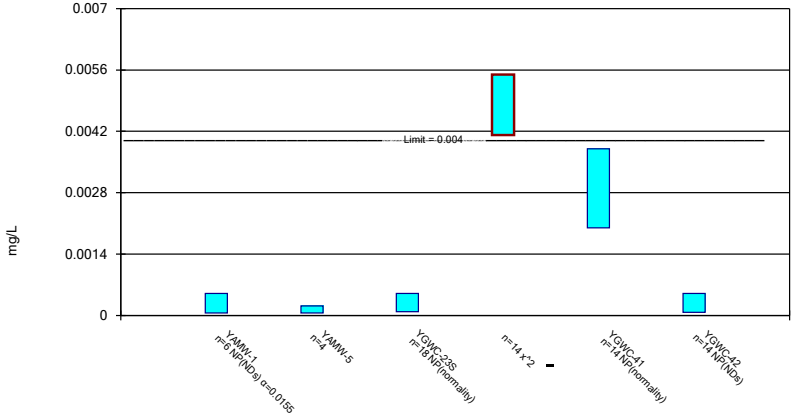
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

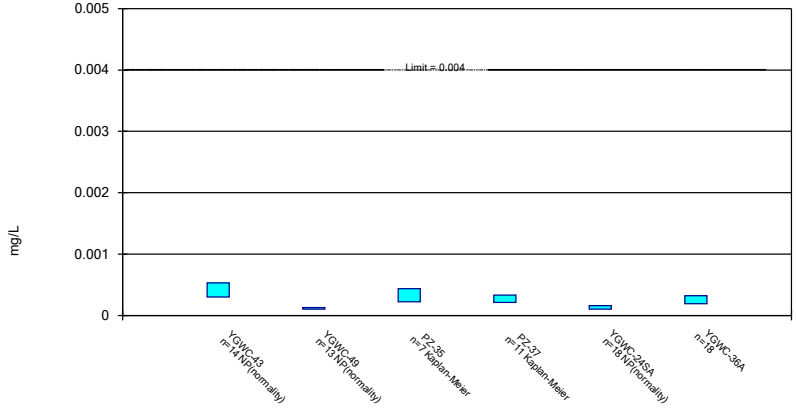
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

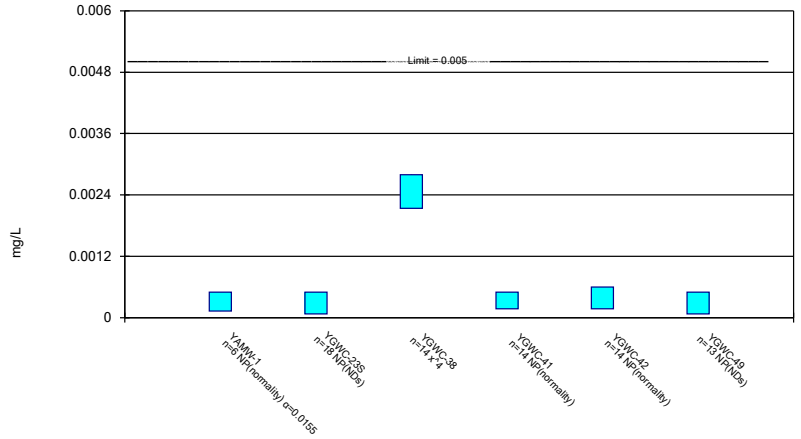
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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.

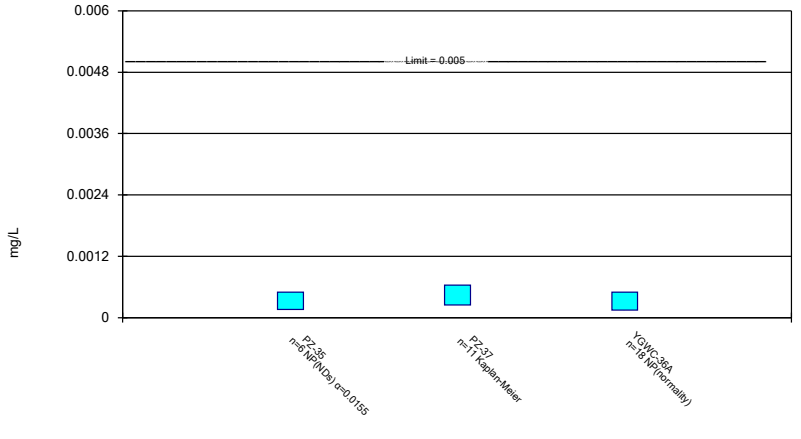


Constituent: Cadmium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

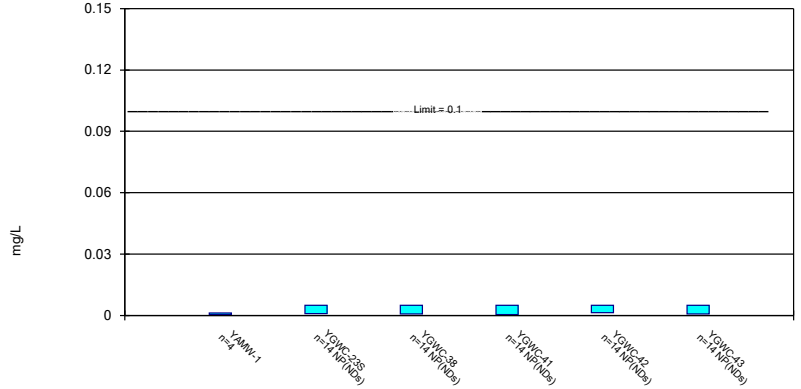


Constituent: Cadmium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

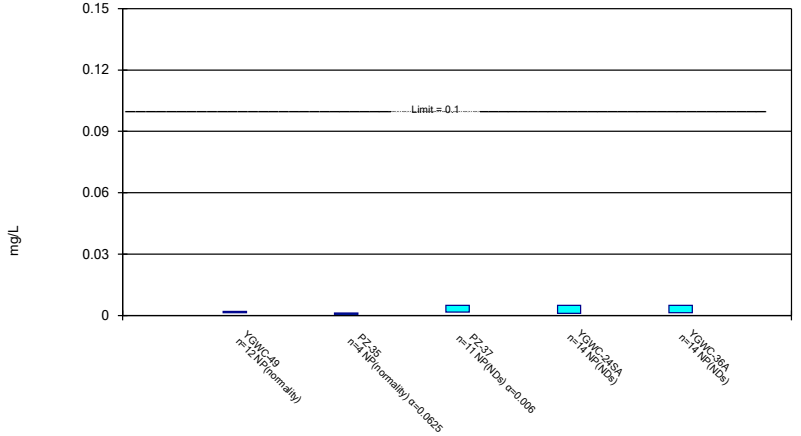


Constituent: Chromium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

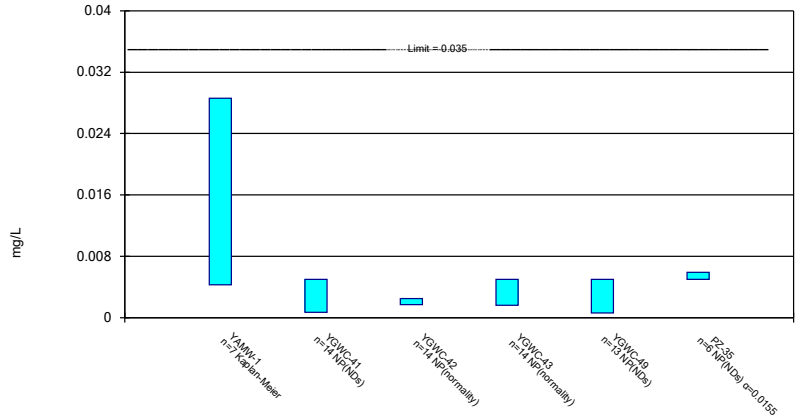
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

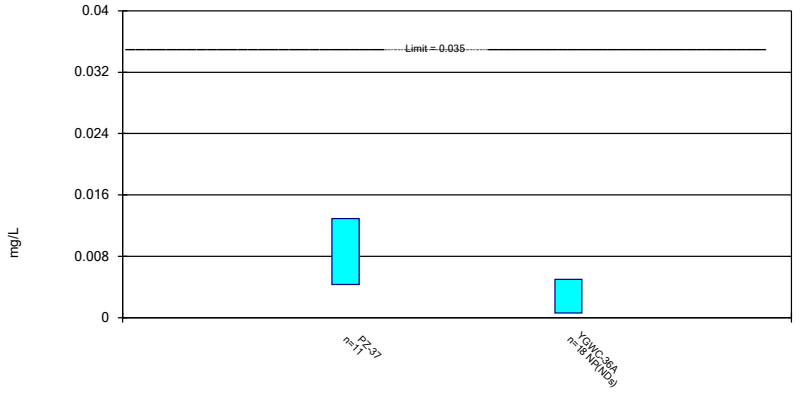


Constituent: Cobalt Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

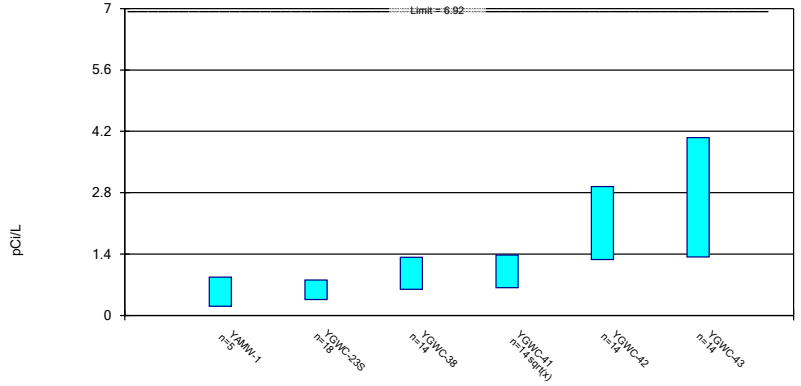


Constituent: Cobalt Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

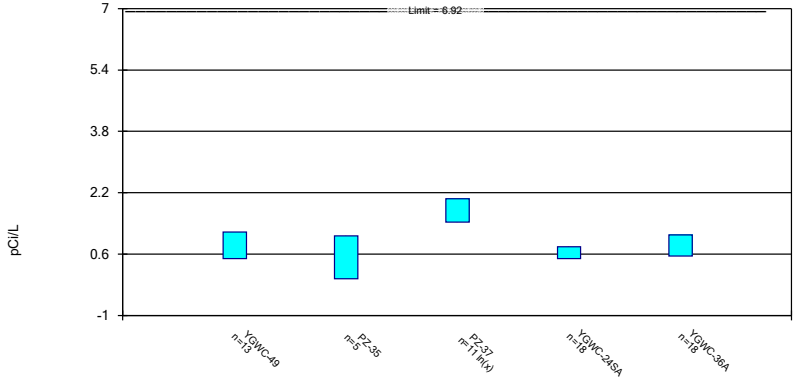


Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric Confidence Interval

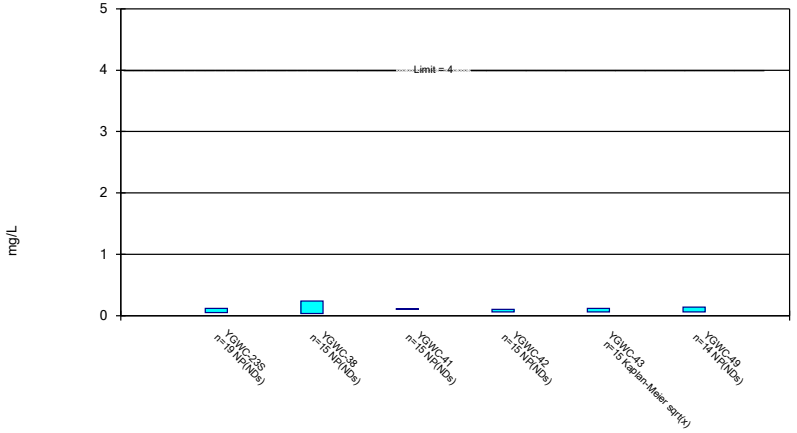
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 9:15 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



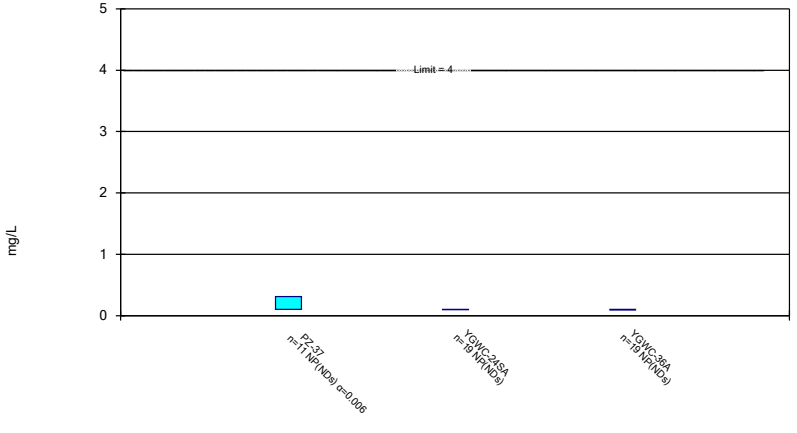
Constituent: Fluoride Analysis Run 5/6/2021 9:15 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



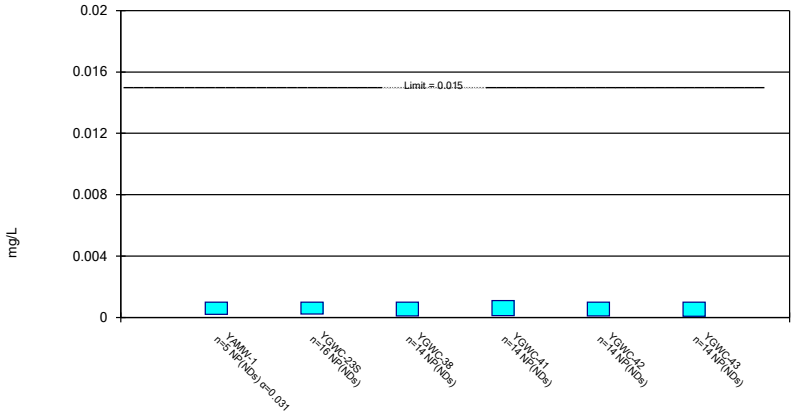
Constituent: Fluoride Analysis Run 5/6/2021 9:15 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



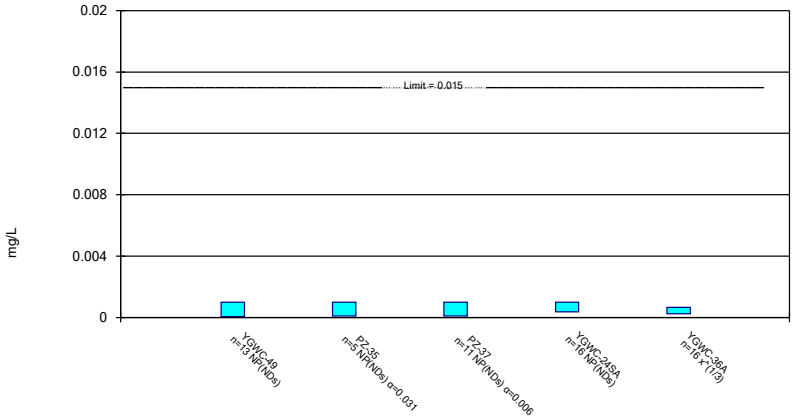
Constituent: Lead Analysis Run 5/6/2021 9:15 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

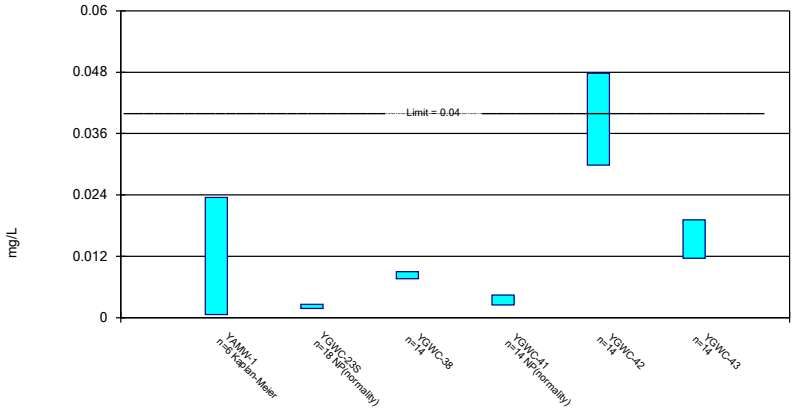


Constituent: Lead Analysis Run 5/6/2021 9:15 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

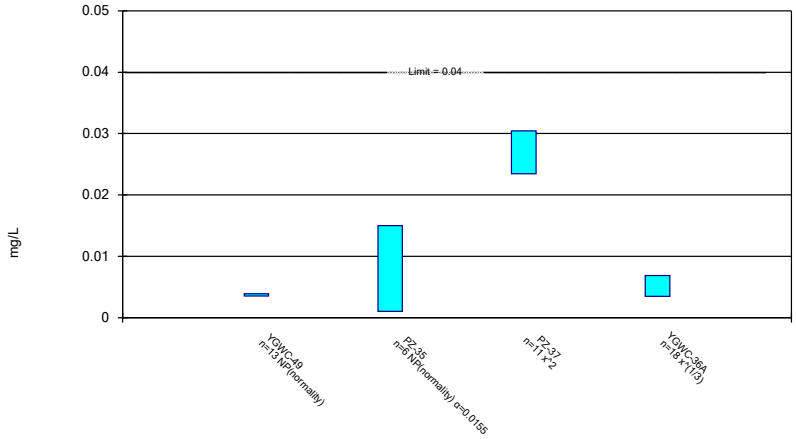
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/6/2021 9:16 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

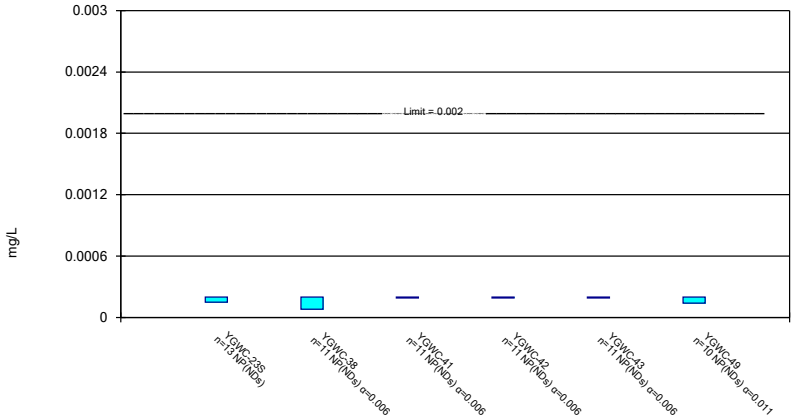
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/6/2021 9:16 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

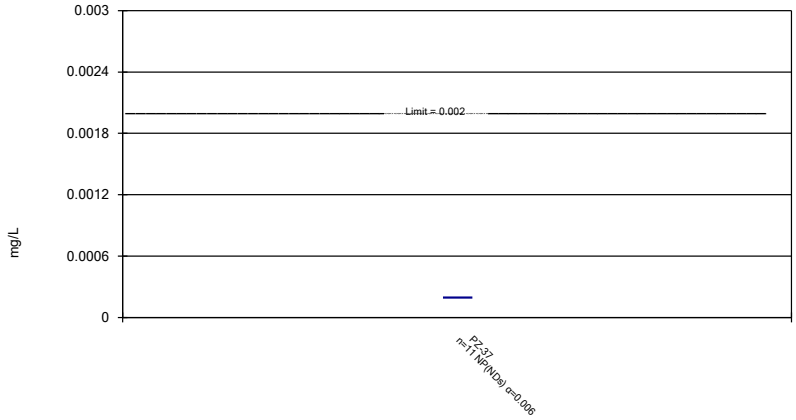
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Mercury Analysis Run 5/6/2021 9:16 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

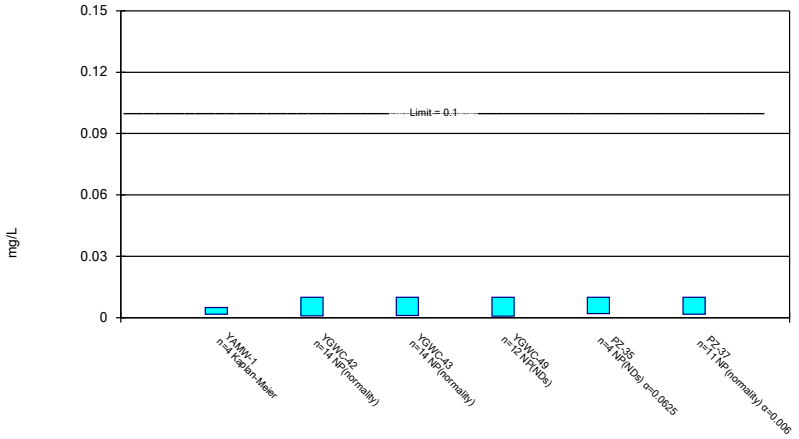
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 5/6/2021 9:16 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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.



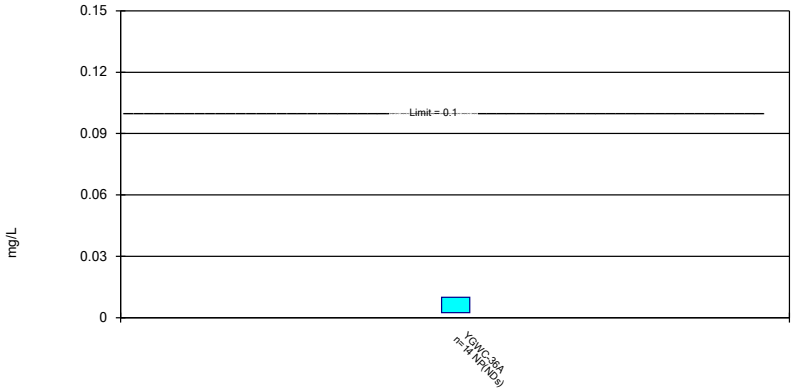
Constituent: Molybdenum Analysis Run 5/6/2021 9:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.



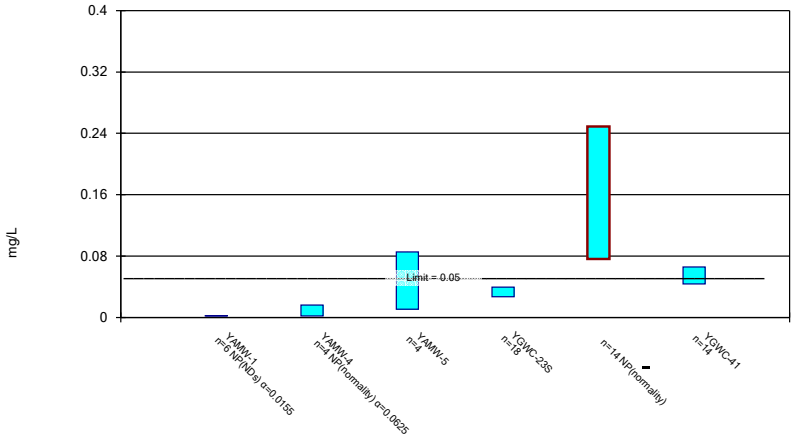
Constituent: Molybdenum Analysis Run 5/6/2021 9:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



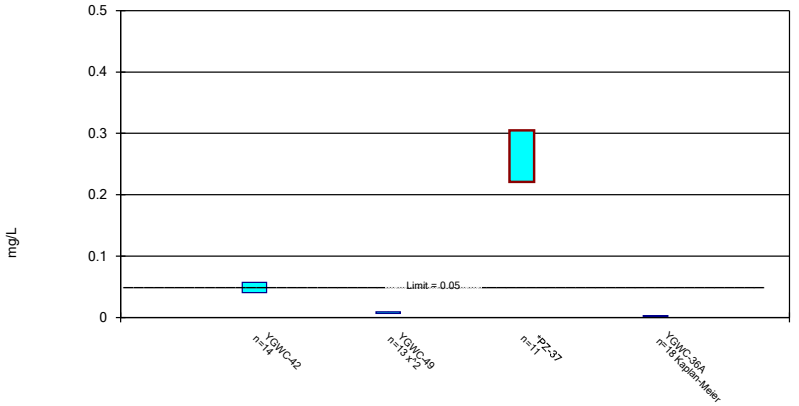
Constituent: Selenium Analysis Run 5/6/2021 9:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/6/2021 9:16 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

FIGURE I.

State Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.025	0.00037	0.006	No	5	0.006874	0.0102	60	None	No	0.031	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	16	0.002541	0.0009916	81.25	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00061	0.006	No	13	0.002312	0.001105	69.23	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	13	0.002877	0.0004438	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	13	0.00281	0.0006851	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	13	0.002793	0.0007461	92.31	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	13	0.002664	0.0008287	84.62	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	5	0.002478	0.001167	80	None	No	0.031	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	11	0.002614	0.0008911	81.82	None	No	0.006	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	16	0.002869	0.000525	93.75	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	16	0.004256	0.006491	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	18	0.004789	0.0008957	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00212	0.0007623	0.01	No	14	0.001676	0.001497	14.29	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	14	0.00288	0.002208	50	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-42	0.003139	0.00143	0.01	No	14	0.002355	0.001306	14.29	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	14	0.004086	0.001819	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.00086	0.01	No	13	0.004035	0.001835	76.92	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	6	0.003608	0.002158	66.67	None	No	0.0155	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	11	0.002504	0.001995	36.36	None	No	0.006	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	18	0.004806	0.000825	94.44	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	18	0.004041	0.001847	77.78	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.04981	0.02919	2	No	6	0.0395	0.007503	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04499	0.02913	2	No	18	0.03706	0.01311	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.0239	0.01832	2	No	14	0.02111	0.003941	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.03029	0.0206	2	No	14	0.02544	0.00684	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04675	0.03191	2	No	14	0.03933	0.01047	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.03572	0.01774	2	No	14	0.02673	0.01269	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07999	0.06987	2	No	13	0.07493	0.006807	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.063	0.032	2	No	6	0.04	0.01166	0	None	No	0.0155	NP (normality)
Barium (mg/L)	PZ-37	0.05778	0.04078	2	No	11	0.04928	0.0102	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	18	0.02053	0.003411	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04411	0.03184	2	No	18	0.03797	0.01014	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	6	0.0004047	0.0001776	66.67	None	No	0.0155	NP (NDs)
Beryllium (mg/L)	YAMW-5	0.0002156	0.00005244	0.004	No	4	0.000134	0.00003593	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	18	0.0002109	0.0001859	27.78	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005497**	**0.004113**	**0.004**	**Yes**	**14**	**0.004743**	**0.001073**	**0**	**None**	**x^2**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.002	0.004	No	14	0.003	0.000862	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.000067	0.004	No	14	0.0003503	0.0002087	64.29	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.0003	0.004	No	14	0.0004286	0.000133	42.86	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	13	0.0001408	0.0001088	7.692	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004361	0.0002224	0.004	No	7	0.0003871	0.0001188	28.57	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003331	0.0002091	0.004	No	11	0.0003355	0.0001069	18.18	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	18	0.0001811	0.000149	16.67	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.0003195	0.0001904	0.004	No	18	0.0002549	0.0001067	5.556	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	6	0.0003233	0.000194	50	None	No	0.0155	NP (normality)
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	18	0.0004761	0.0001014	94.44	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.002798	0.002139	0.005	No	14	0.00235	0.0006149	0	None	x^4	0.01	Param.
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	14	0.0002886	0.0001446	28.57	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.00017	0.005	No	14	0.0003764	0.0001667	42.86	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	13	0.0004669	0.0001193	92.31	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	6	0.0004433	0.0001388	83.33	None	No	0.0155	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006329	0.0002453	0.005	No	11	0.0004727	0.0002328	18.18	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	18	0.0002433	0.0001453	22.22	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.001163	0.0003768	0.1	No	4	0.00077	0.0001732	0	None	No	0.01	Param.
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	14	0.003296	0.002061	57.14	None	No	0.01	NP (NDs)

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	14	0.004368	0.001607	85.71	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	14	0.004671	0.001232	92.86	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	14	0.004095	0.001807	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	14	0.003755	0.002043	71.43	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	12	0.001958	0.0009839	8.333	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.0012	0.0006	0.1	No	4	0.0007775	0.0002852	0	None	No	0.0625	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	11	0.004055	0.001633	72.73	None	No	0.006	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	14	0.004153	0.001684	78.57	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	14	0.004034	0.001699	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02859	0.004268	0.035	No	7	0.01643	0.01106	28.57	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	14	0.003742	0.002072	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	14	0.0022	0.0008927	7.143	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	14	0.00325	0.001688	42.86	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	13	0.003654	0.002103	69.23	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	6	0.00515	0.0003674	83.33	None	No	0.0155	NP (NDs)
Cobalt (mg/L)	PZ-37	0.0129	0.004336	0.035	No	11	0.008618	0.005139	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	18	0.003761	0.002058	72.22	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.8723	0.2073	6.92	No	5	0.5398	0.1984	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.8108	0.3587	6.92	No	18	0.5848	0.3736	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.326	0.5981	6.92	No	14	0.962	0.5138	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.374	0.6299	6.92	No	14	1.032	0.5676	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.942	1.277	6.92	No	14	2.11	1.175	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	4.059	1.333	6.92	No	14	2.696	1.924	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.175	0.4779	6.92	No	13	0.8266	0.469	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	1.075	-0.04565	6.92	No	5	0.5146	0.3343	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	2.039	1.437	6.92	No	11	1.749	0.4126	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7865	0.4799	6.92	No	18	0.6332	0.2534	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.095	0.5456	6.92	No	18	0.8205	0.4544	0	None	No	0.01	Param.
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	19	0.09468	0.02023	84.21	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	15	0.1616	0.1178	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	15	0.1007	0.002582	86.67	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	15	0.08607	0.02601	73.33	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1159	0.05777	4	No	15	0.1069	0.05423	26.67	Kaplan-Meier	sqrt(x)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.06	4	No	14	0.09929	0.02702	57.14	Kaplan-Meier	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	11	0.1773	0.1198	63.64	None	No	0.006	NP (NDs)
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	19	0.09637	0.01535	89.47	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	19	0.09242	0.03298	63.16	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.0013	No	5	0.000838	0.0003622	80	None	No	0.031	NP (NDs)
Lead (mg/L)	YGWC-23S	0.001	0.00021	0.0013	No	16	0.0008016	0.0003629	75	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.0013	No	14	0.0008071	0.0003832	78.57	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.0013	No	14	0.0007541	0.0004218	64.29	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.0013	No	14	0.0007422	0.0004243	71.43	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.0013	No	14	0.0008682	0.000335	85.71	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.0013	No	13	0.0009276	0.000261	92.31	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.0013	No	5	0.0006474	0.0004833	60	None	No	0.031	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.0013	No	11	0.0006066	0.0004535	54.55	None	No	0.006	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.0013	No	16	0.0009008	0.0002768	87.5	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.000658	0.0002358	0.0013	No	16	0.0004956	0.0004239	12.5	None	x^(1/3)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.0235	0.0006154	0.03	No	6	0.01255	0.008417	16.67	Kaplan-Meier	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.03	No	18	0.002994	0.003057	5.556	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008994	0.007591	0.03	No	14	0.008293	0.0009903	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0025	0.03	No	14	0.004314	0.003188	7.143	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.0478	0.02983	0.03	No	14	0.03881	0.01268	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01912	0.01164	0.03	No	14	0.01538	0.005279	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.03	No	13	0.003708	0.0002465	0	None	No	0.01	NP (normality)

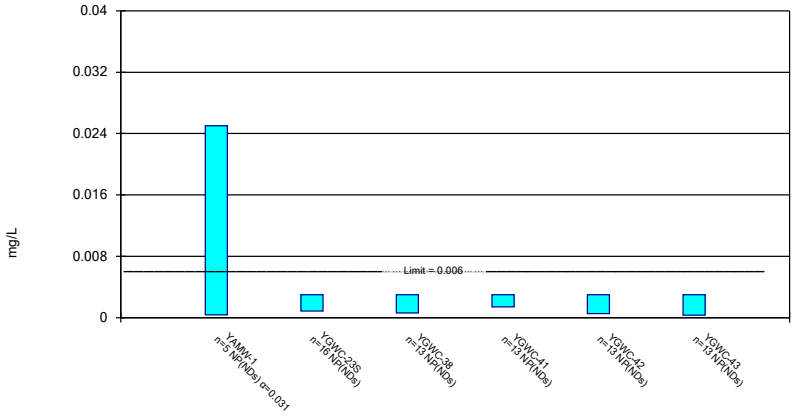
State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 5/6/2021, 9:21 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lithium (mg/L)	PZ-35	0.015	0.001	0.03	No	6	0.005133	0.006226	16.67	None	No	0.0155	NP (normality)
Lithium (mg/L)	PZ-37	0.03042	0.02345	0.03	No	11	0.02679	0.004677	9.091	None	x^2	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006884	0.003471	0.03	No	18	0.005478	0.002992	5.556	None	x^(1/3)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	13	0.0001883	0.00003045	84.62	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	11	0.0001743	0.00005804	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.0002	0.002	No	11	0.0001862	0.00004583	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.0002	0.002	No	11	0.0001865	0.00004462	90.91	None	No	0.006	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	10	0.0001801	0.0000459	80	None	No	0.011	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.0002	0.002	No	11	0.0001873	0.00004221	90.91	None	No	0.006	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004895	0.001572	0.014	No	4	0.004925	0.003462	25	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00094	0.014	No	14	0.00525	0.004314	42.86	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0011	0.014	No	14	0.005679	0.004493	50	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.014	No	12	0.009225	0.002685	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.014	No	4	0.007975	0.00405	75	None	No	0.0625	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0016	0.014	No	11	0.004818	0.004118	36.36	None	No	0.006	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.014	No	14	0.007071	0.003747	57.14	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.0025	0.0019	0.05	No	6	0.0024	0.0002449	83.33	None	No	0.0155	NP (NDs)
Selenium (mg/L)	YAMW-4	0.016	0.0018	0.05	No	4	0.0057	0.006875	50	None	No	0.0625	NP (normality)
Selenium (mg/L)	YAMW-5	0.08521	0.01079	0.05	No	4	0.048	0.01639	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.03964	0.02677	0.05	No	18	0.03321	0.01064	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**14**	**0.1755**	**0.07444**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06577	0.04363	0.05	No	14	0.0547	0.01563	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05735	0.04038	0.05	No	14	0.04886	0.01198	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.00899	0.006583	0.05	No	13	0.007646	0.00198	7.692	None	x^2	0.01	Param.
Selenium (mg/L)	**PZ-37**	**0.3047**	**0.2211**	**0.05**	**Yes**	**11**	**0.2629**	**0.0502**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.002744	0.001829	0.05	No	18	0.002433	0.0005931	33.33	Kaplan-Meier	No	0.01	Param.

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

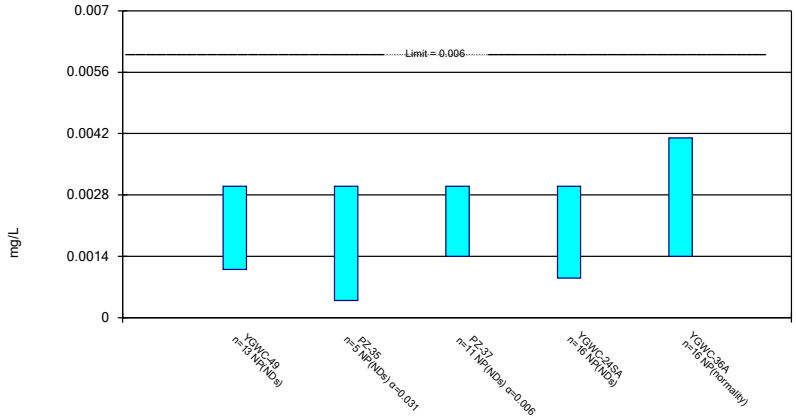


Constituent: Antimony Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

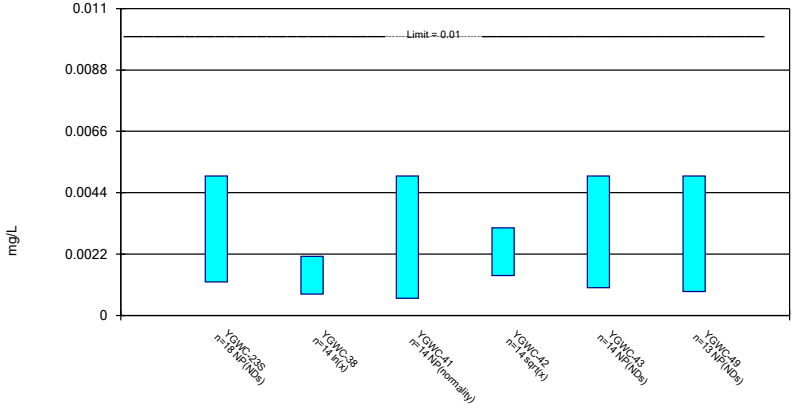


Constituent: Antimony Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

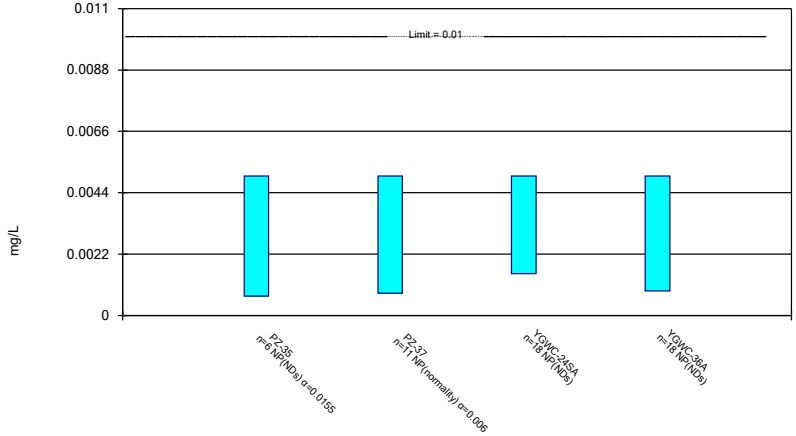


Constituent: Arsenic Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

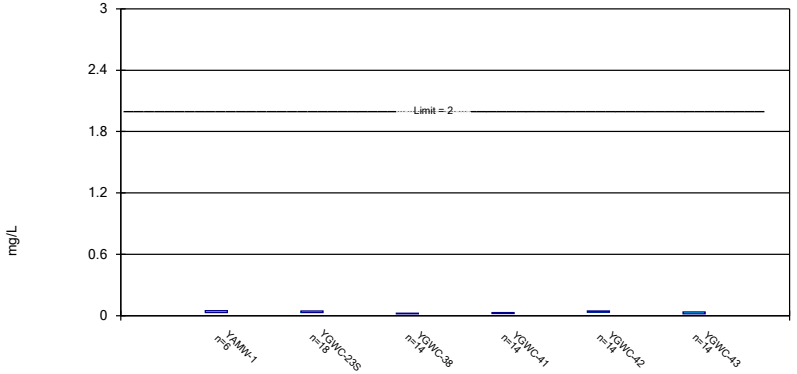
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Arsenic Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

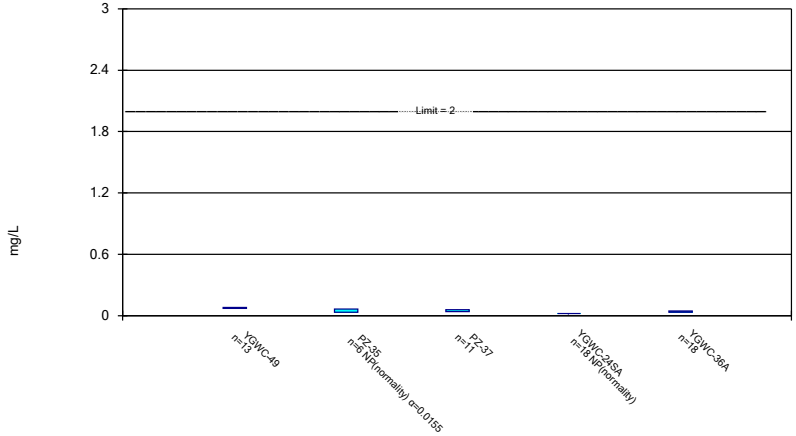


Constituent: Barium Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

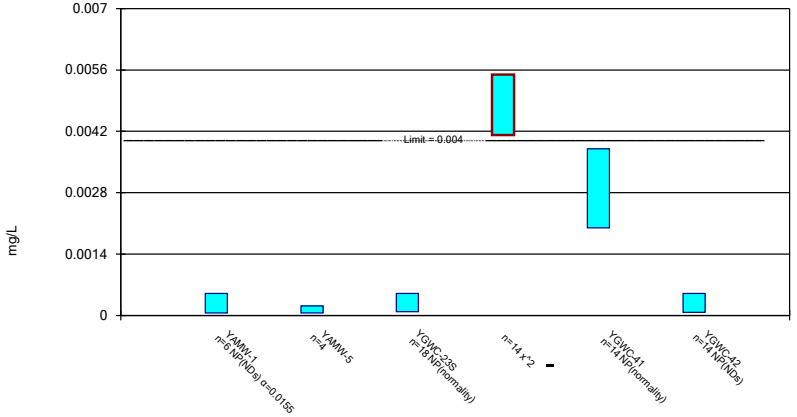


Constituent: Barium Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

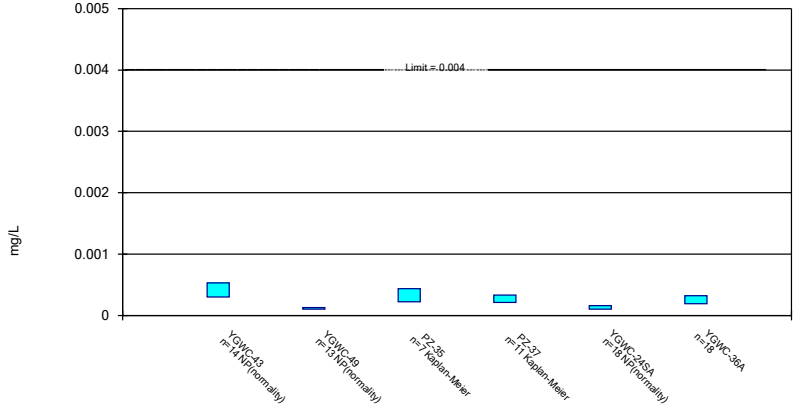


Constituent: Beryllium Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

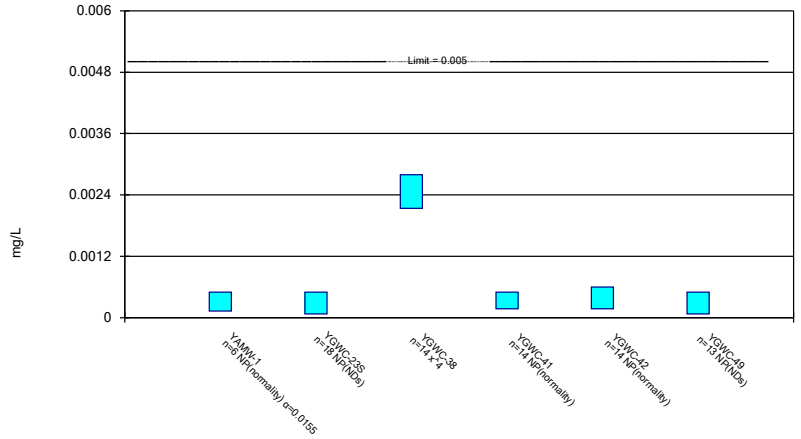
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/6/2021 9:19 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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.



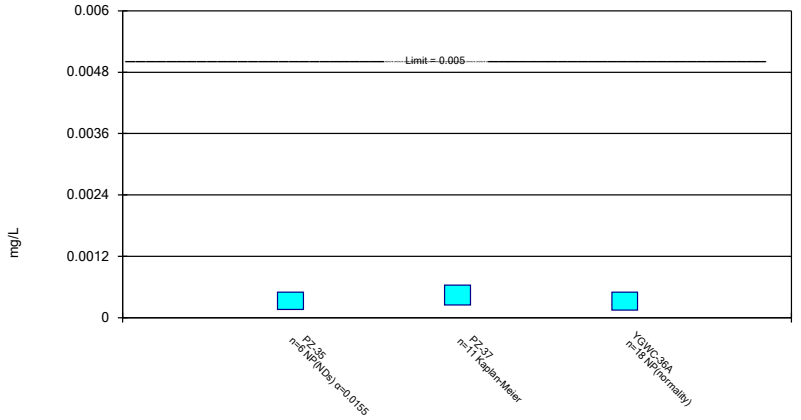
Constituent: Cadmium Analysis Run 5/6/2021 9:19 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



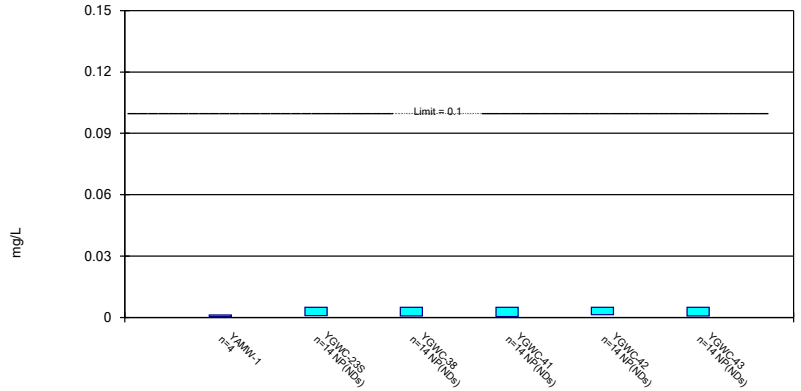
Constituent: Cadmium Analysis Run 5/6/2021 9:19 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



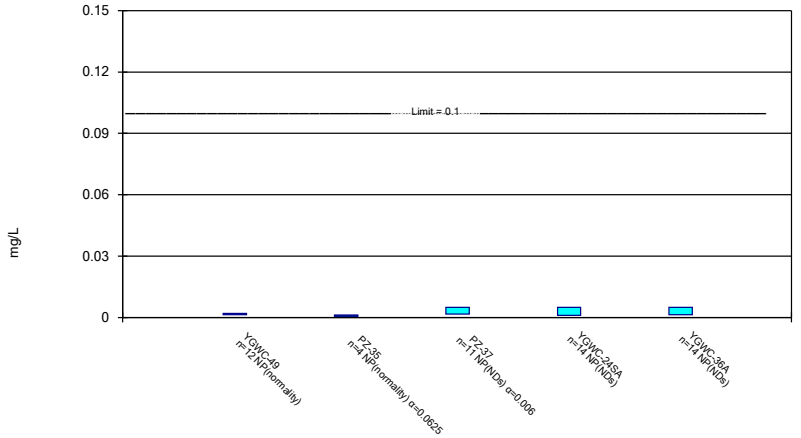
Constituent: Chromium Analysis Run 5/6/2021 9:19 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

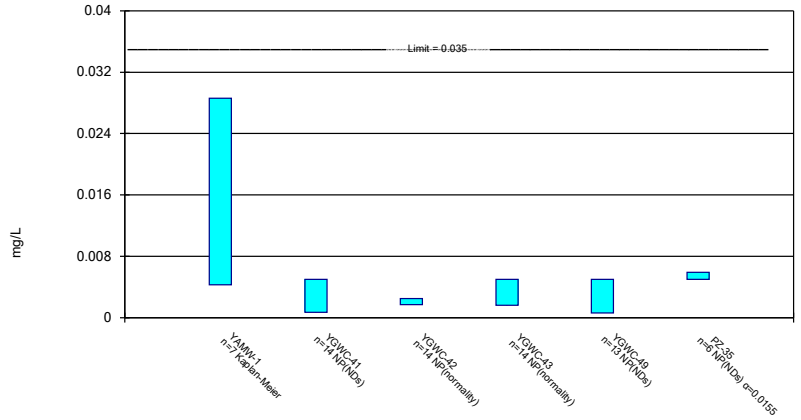


Constituent: Chromium Analysis Run 5/6/2021 9:20 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

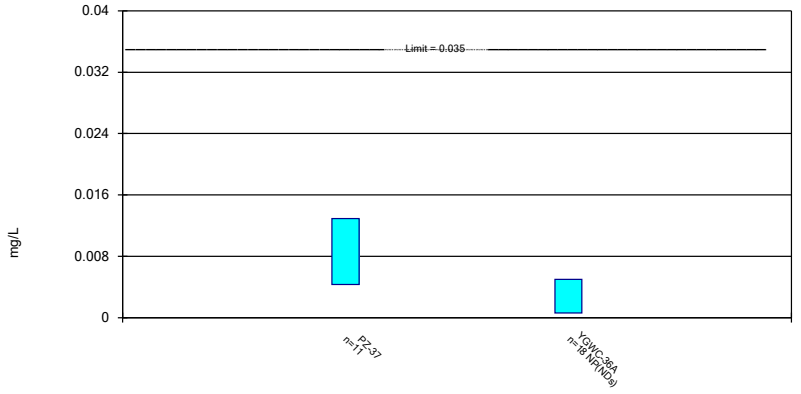


Constituent: Cobalt Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

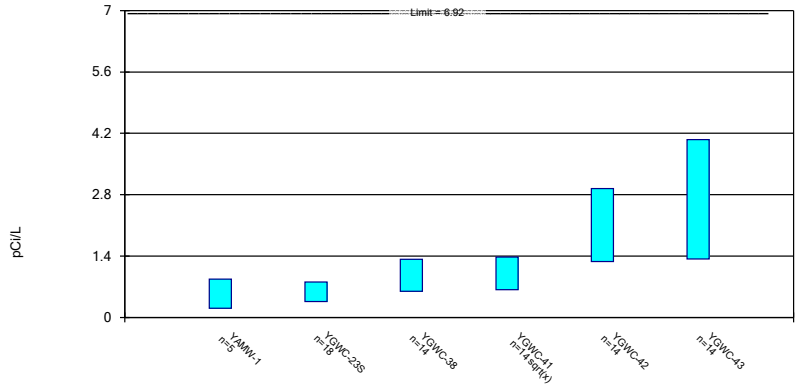


Constituent: Cobalt Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

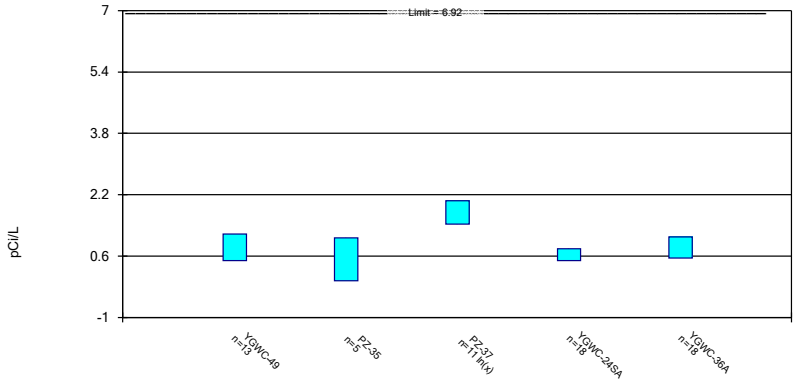


Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric Confidence Interval

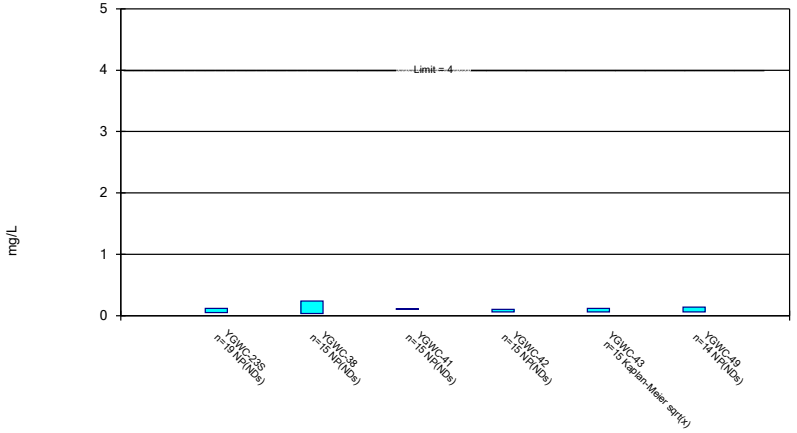
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



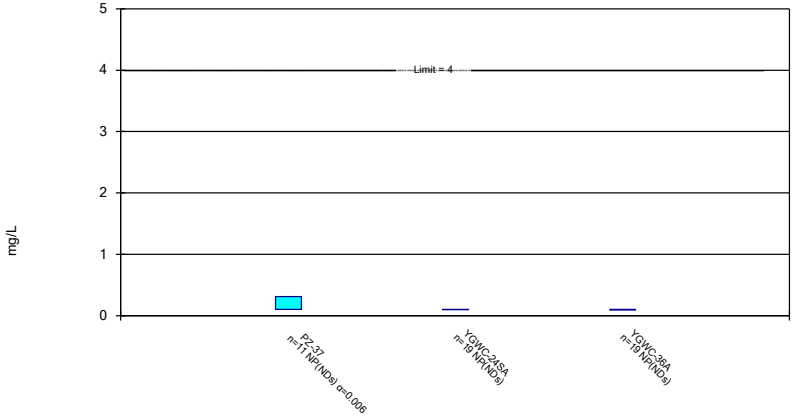
Constituent: Fluoride Analysis Run 5/6/2021 9:20 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



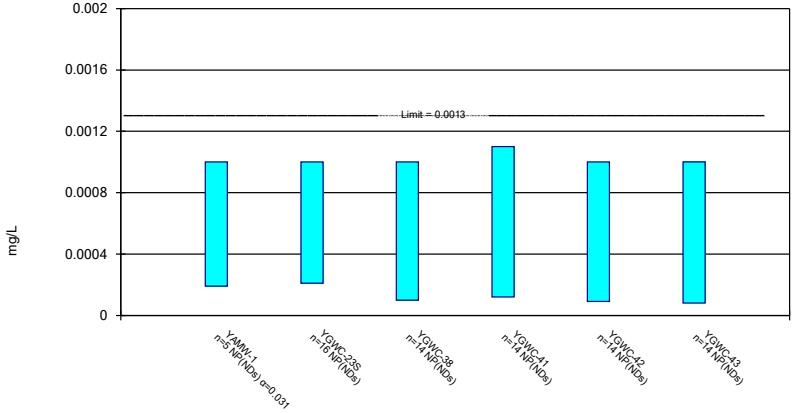
Constituent: Fluoride Analysis Run 5/6/2021 9:20 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



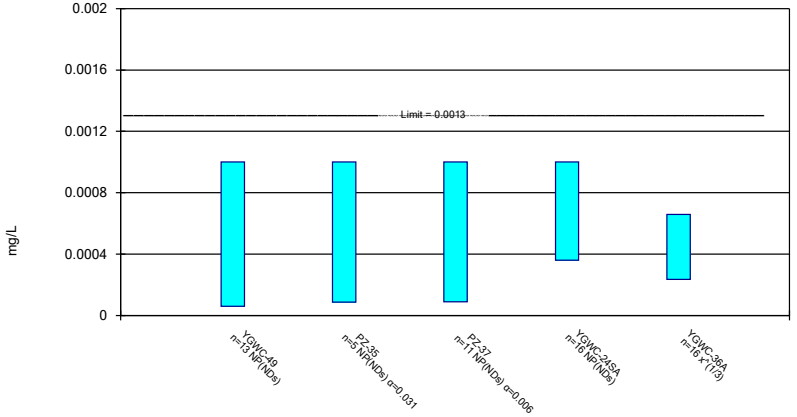
Constituent: Lead Analysis Run 5/6/2021 9:20 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

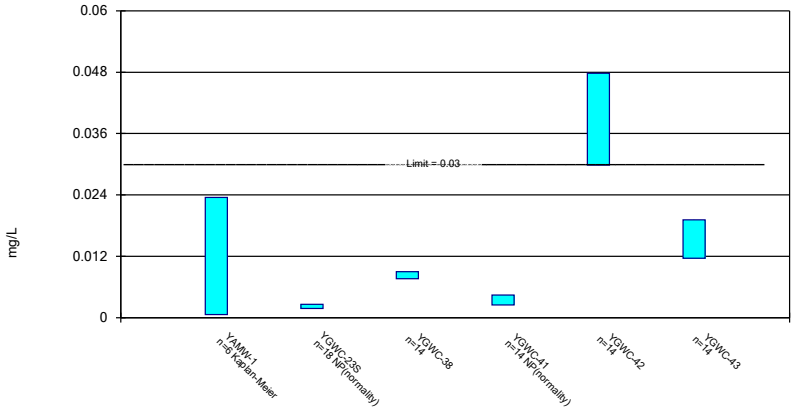


Constituent: Lead Analysis Run 5/6/2021 9:20 PM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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.

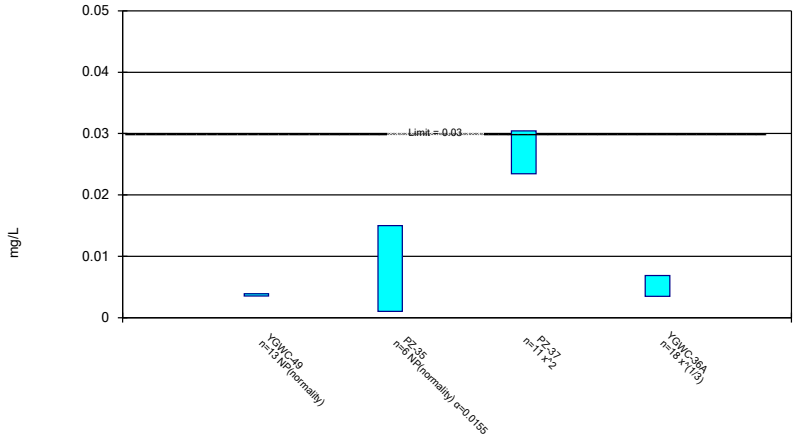


Constituent: Lithium Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

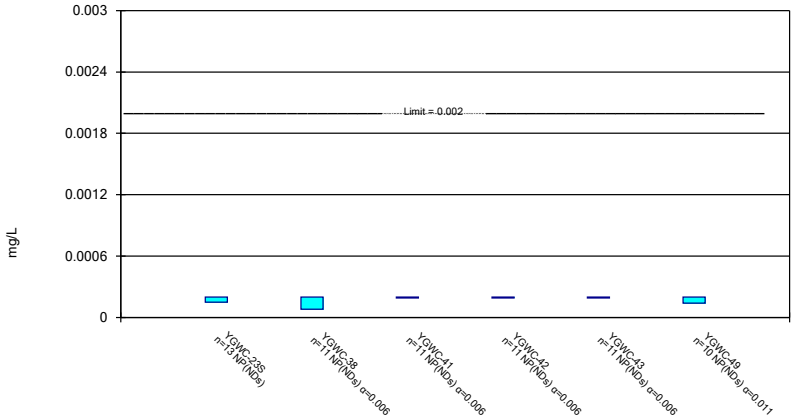


Constituent: Lithium Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

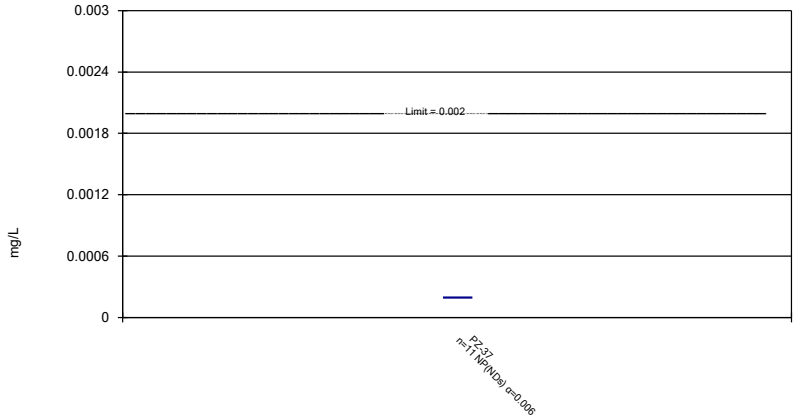


Constituent: Mercury Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

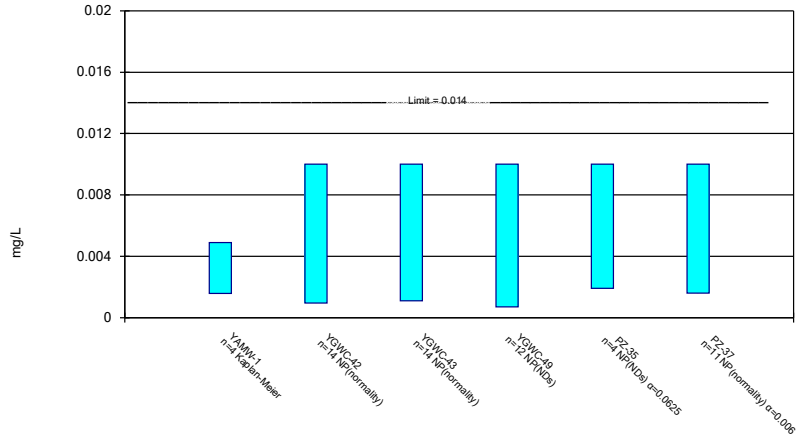
Compliance Limit is not exceeded.



Constituent: Mercury Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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.

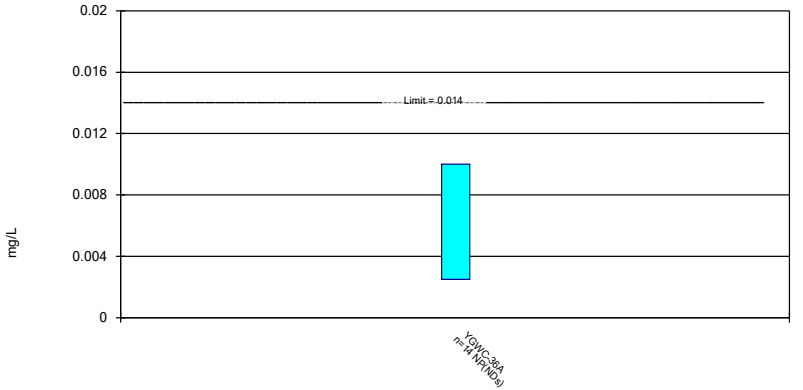


Constituent: Molybdenum Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

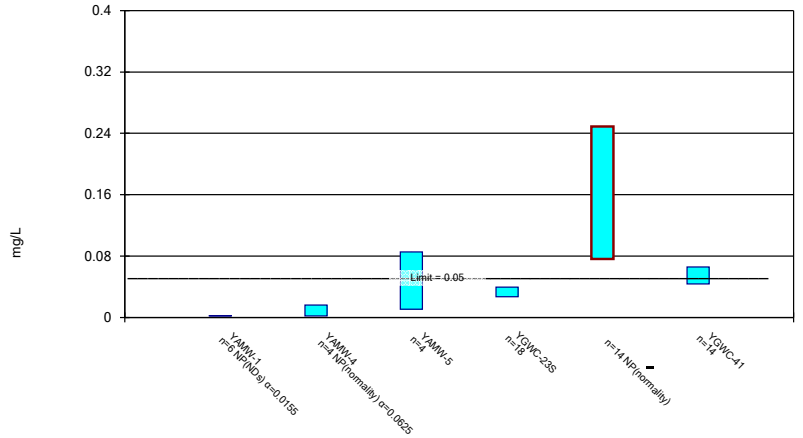


Constituent: Molybdenum Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

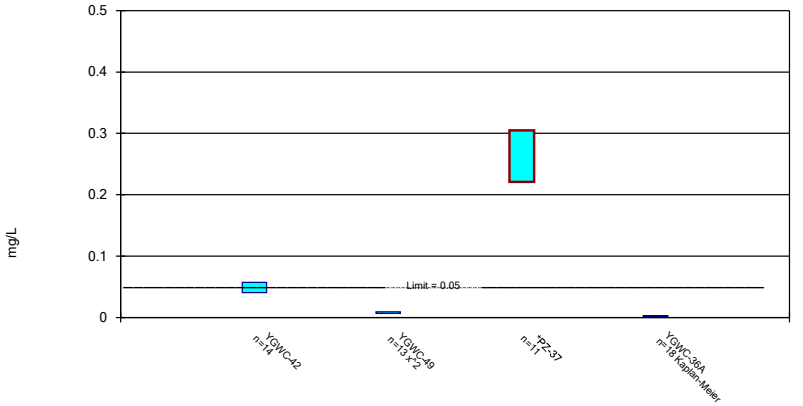


Constituent: Selenium Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.28 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 5/6/2021 9:20 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

August/September 2021

GROUNDWATER STATS CONSULTING

January 31, 2022

Southern Company Services
Attn: Ms. Lauren Coker
241 Ralph McGill Blvd NE, Bin 10160
Atlanta, GA 30308-3374

Re: Plant Yates Ash Management Area (AMA) and R6 CCR Landfill
August/September 2021 Statistical Analysis

Dear Ms. Coker,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the August/September 2021 semi-annual Groundwater Detection and Assessment Monitoring statistical analysis for Georgia Power Company's Plant Yates Ash Management Area (AMA) and R6 CCR Landfill. 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-23S, YGWC-24SA, YGWC-36A, YGWC-38, YGWC-41, YGWC-42, YGWC-43, YGWC-49
- **Delineation wells:** YAMW-1, YAMW-2, YAMW-3, YAMW-4, YAMW-5, PZ-35, PZ-37, and PZ-52D

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters. When a minimum of 4 samples is available, delineation wells are evaluated using confidence intervals for the Appendix IV constituents.

Well YGWC-24SA was installed in June 2020 as a replacement well for YGWC-24S and well YGWC-36A was installed in September 2020 as a replacement well for YGWC-36 to supplement existing data for each respective well. In all cases, concentrations from both wells are below established MCLs. When a minimum of 8 samples have been collected from new well YGWC-36A, the Mann-Whitney test of medians will be used to evaluate whether the medians of data from both wells are statistically similar. In cases where there are statistically significant differences, the historical record will be truncated so that only data from new well YGWC-36A are evaluated in the confidence interval comparisons to respective Groundwater Protection Standards. Throughout this report, well YGWC-24SA refers to the combined data from both wells YGWC-24S and YGWC-24SA and well YGWC-36A refers to data from both wells YGWC-36 and YGWC-36A.

All data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed Kristina Rayner, Groundwater 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 and delineation well/constituent pairs with 100% non-detects follows this letter. Additionally, when Appendix IV constituents are not detected during a scheduled Scan event, no statistical analyses are required during the semi-annual sample events. During the annual Scan event conducted in February 2021, thallium was not detected; therefore, it was not required to be sampled during the subsequent event. In some cases, upgradient wells at a given unit were not sampled for all constituents if no detections were present at downgradient wells for that particular unit. The following constituents were not detected during their respective Scan events at other Plant Yates units; therefore, upgradient wells at the units listed below were not sampled for these constituents:

- Yates AP-2: mercury and thallium

Combined upgradient well data from all units at Plant Yates are utilized to construct statistical limits for Appendix III and IV parameters. The absence of samples from upgradient wells will affect the sample size of the combined background data set that is used for interwell limits among all units at Plant Yates; however, the calculated limits are not affected greatly.

For all constituents, a substitution of the most recent reporting limit is used for non-detect data and this generally gives the most conservative limit in each case. In time series plots, a single reporting limit substitution is used across all wells for a given parameter since the wells are plotted as a group. For interwell prediction and tolerance limits, a single reporting limit substitution is used across upgradient wells for a given parameter. Regarding the case of cobalt, due to varying detection limits in individual wells, the most recent reporting limit of 0.005 mg/L was substituted across all wells for all calculations and reports.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells. Values in background which have been flagged as outliers may be seen in a

lighter font and as a disconnected symbol on the graphs. A summary of flagged outliers follows this report (Figure C).

Summary of Statistical Methods – Appendix III and IV Parameters

Based on the April 2019 evaluation and state and federal regulatory requirements described below, the following methods were selected for Appendix III and IV constituents:

- Appendix III: Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, fluoride, pH, sulfate, and TDS
- Appendix IV: Confidence intervals on downgradient well data compared against Ground Water Protections Standards (GWPS) for each Appendix IV constituent

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 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 limits is dependent upon the available background sample size, number of future comparisons, and verification resample plan. The following approaches are used for handling non-detects (USEPA, 2009):

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel

to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the interwell case, prediction limits are updated with upgradient well data during each event after careful screening for any new outliers. In some cases, the earlier portion of data are deselected prior to construction of limits to provide sensitive limits that will rapidly detect changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening Conducted in April 2019

Outlier Analysis

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. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, several outliers were identified. When the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e., measurements reported by the laboratory between the Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

During the time of the screening, none of the outliers identified by Tukey's method were flagged in the database as all values were either similar to remaining measurements within the same well and neighboring wells, or the values were reported non-detects. Later, when all upgradient wells were pooled to construct statistical limits, one detected value of 6.3 s.u. for pH at well YGWA-47 (an upgradient well from AP-1) was flagged as an outlier because it was unusually high during a single event compared to all other values at neighboring wells. 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. A substitution of the most recent reporting limit was applied when varying detection limits existed in data. When the reporting limit was higher than the CCR-rule specified levels discussed below, non-detects were substituted with one half the reporting limit.

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 each well to identify statistically significant increasing or decreasing trends and the results of those findings were submitted with the screening. 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. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed several statistically significant decreasing and increasing trends for the Appendix III parameters. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short with only two years of record, making it difficult to separate trends from normal year-to-year variation; therefore, no adjustments were made to the data sets. If the observed decreasing or increasing trends persist over a longer time frame, some records may need to be truncated.

Appendix III – Determination of Spatial Variation

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits

constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

The ANOVA identified variation among upgradient well data for all Appendix III parameters. These constituents were further evaluated during the screening for the appropriateness of intrawell or interwell methods for each constituent. However, interwell methods will be used for all Appendix III constituents in accordance with Georgia EPD requirements.

Statistical Analysis of Appendix III Parameters – August/September 2021

All Appendix III parameters were analyzed using interwell prediction limits. Background (upgradient) well data were re-assessed for potential outliers during this analysis. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs. No new values were flagged for Appendix III parameters, and a summary of flagged outliers follows this report (Figure C).

Interwell Prediction Limits

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed using all historical upgradient well data through September 2021 (Figure D). Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The August or September 2021 sample from each downgradient well is compared to the background limit to determine whether statistically significant increases (SSIs) 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 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 and, therefore, no exceedance is noted and no further action is necessary. If no resample is collected, the original result is considered a confirmed exceedance. A summary table of the interwell prediction limits follows this letter (Figure D). Prediction limit exceedances were noted for the following Appendix III well/constituent pairs:

- Boron: YGWC-23S, YGWC-38, YGWC-41, YGWC-42, and YGWC-43
- Calcium: YGWC-38 and YGWC-42
- Chloride: YGWC-24SA
- Sulfate: YGWC-38 and YGWC-42
- TDS: YGWC-38, YGWC-41, and YGWC-42

Trend Test Evaluation – Appendix III

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure E). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. Upgradient trends are an indication of natural variability in groundwater unrelated to practices at the site. Both a summary and complete graphical results of the trend tests follow this report. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: YGWC-43
- Calcium: GWA-2, YGWA-1D, YGWA-17S, and YGWA-21I (all upgradient)
- Chloride: YGWA-17S (upgradient), YGWA-20S (upgradient), and YGWC-24SA
- pH: YGWA-21I (upgradient)
- Sulfate: GWA-2, YGWA-1D, YGWA-3D, and YGWA-5I (all upgradient)

Decreasing:

- Boron: YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-38, YGWC-41, and YGWC-42
- Calcium: YGWA-1I (upgradient), YGWA-5D (upgradient), YGWA-18S (upgradient), YGWA-47 (upgradient), YGWC-38, and YGWC-42
- Chloride: YGWA-3D, YGWA-3I, YGWA-5D, and YGWA-47 (all upgradient)
- pH: YGWA-5D, YGWA-18S, and YGWA-39 (all upgradient)
- Sulfate: YGWA-5D (upgradient), YGWA-39 (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-38, and YGWC-42
- TDS: YGWA-5D (upgradient), YGWA-40 (upgradient), YGWA-47 (upgradient), YGWC-38, YGWC-41, and YGWC-42

Statistical Analysis of Appendix IV Parameters – August/September 2021

For analysis of Appendix IV parameters, confidence intervals for each downgradient well/constituent were compared against corresponding Groundwater Protection Standards (GWPS). GWPS were developed as described below. Data from upgradient wells for Appendix IV parameters are reassessed for outliers during each analysis.

A high value of 0.074 mg/L for cobalt at upgradient well GWA-2 from the August 2021 sample event was flagged in order to maintain statistical limits that are conservative (i.e., lower) from a regulatory perspective. The more recent reported measurements since August 2020 were previously flagged as these measurements were two orders of magnitude higher than remaining measurements at this well. If further studies indicate these measurements represent natural variation in groundwater quality, the values will be included in construction of interwell prediction limits. A summary of flagged outliers follows this report (Figure C).

Interwell Upper Tolerance Limits

First, interwell tolerance limits were used to calculate site-specific background limits from all available pooled upgradient well data through September 2021 for Appendix IV constituents (Figure F). Parametric tolerance limits are used when data follow a normal or transformed-normal distribution. When data contained greater than 50% non-detects or did not follow a normal or transformed-normal distribution, non-parametric tolerance limits were used. When the alpha level (or false positive rate) for a nonparametric limit is shown as NaN in the results table, it indicates that the background sample size is large enough such that the resulting alpha level (or false positive rate) is too small to display in the results table.

Groundwater Protection Standards

The background limits were then used when determining the Groundwater Protection Standard (GWPS) under 40 CFR §257.95(h) and Georgia EPD Rule 391-3-4-.10(6)(a).

As described in 40 CFR §257.95(h) (1-3), the Federal GWPS is:

- The maximum contaminant level (MCL) established under §141.62 and §141.66 of this title
- Where an MCL has not been established for a constituent, CCR-rule specified levels have been specified for cobalt (0.006 mg/L), lead (0.015 mg/L), lithium (0.040 mg/L), and molybdenum (0.100 mg/L)

- The respective background level for a constituent when the background level is higher than the MCL or Federal CCR Rule identified GWPS

On July 30, 2018, USEPA revised the Federal CCR rule updating GWPS for cobalt, lead, lithium, and molybdenum as described above in 40 CFR §257.95(h)(2). Georgia EPD has not incorporated the updated GWPS into the current Georgia EPD Rules for Solid Waste Management 391-3-4-.10(6)(a); therefore, for sites regulated under Georgia EPD Rules, the State GWPS is:

- The MCL or
- The background concentration when an MCL is not established or when the background concentration is higher than the MCL.

Following the above Georgia EPD Rule requirements and the CCR Rule, Federal and State GWPS were established for Appendix IV constituents for the August/September 2021 sample event (Figure G).

Confidence Intervals

To complete the statistical comparison to GWPS, confidence intervals were constructed for each of the detected Appendix IV constituents in each downgradient well using all historical data through September 2021 according to both Federal and State rules (Figures H and I, respectively). Delineation wells were included when a minimum of 4 samples were available. Note that while a GWPS is established for thallium, no statistical comparison with confidence intervals is required because this constituent was not sampled.

The Sanitas software was used to calculate the tolerance limits and the confidence intervals. Those confidence intervals were compared to the GWPS established using the CCR Rules for the federal requirements and the Georgia EPD Rules 391-3-4-.10(6)(a) for the State requirements. 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. For both federal and state confidence intervals, exceedances were noted for the following well/constituent pairs:

Federal:

- Beryllium: YGWC-38
- Selenium: YGWC-38 and PZ-37

State:

- Beryllium: YGWC-38
- Lithium: YGWC-42
- Selenium: YGWC-38 and PZ-37

Trend Test Evaluation – Appendix IV

Data at wells with confidence interval exceedances are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure J). 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 trends, it is an indication of natural variability in groundwater quality unrelated to practices at the site. A summary of the Appendix IV trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing trends:

- Lithium: YGWA-3D (upgradient), YGWA-3I (upgradient), YGWA-39 (upgradient), and YGWC-42
- Selenium: YGWA-17S (upgradient)

Decreasing trends:

- Beryllium: YGWA-20S (upgradient) and YGWC-38
- Lithium: YGWA-18I, YGWA-30I, and YGWA-47 (all upgradient)
- Selenium: YGWC-38

Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Yates Ash Management Area (AMA) and R6 CCR Landfill. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew T. Collins
Project Manager

Kristina L. Rayner
Groundwater Statistician

100% Non-Detects: Appendix IV Downgradient & Delineation

Analysis Run 10/28/2021 7:34 PM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Antimony (mg/L)
YAMW-2

Arsenic (mg/L)
YAMW-1, YAMW-2

Beryllium (mg/L)
YAMW-4

Cadmium (mg/L)
YAMW-2, YAMW-4, YGWC-43, YGWC-24SA

Chromium (mg/L)
YAMW-5

Cobalt (mg/L)
YGWC-23S, YGWC-38, YGWC-24SA

Fluoride (mg/L)
YAMW-1, YAMW-2, YAMW-5, PZ-35

Lithium (mg/L)
YAMW-2, YGWC-24SA

Mercury (mg/L)
YAMW-1, YAMW-2, YAMW-4, YAMW-5, PZ-35, YGWC-24SA, YGWC-36A

Molybdenum (mg/L)
YAMW-2, YAMW-5, YGWC-23S, YGWC-38, YGWC-41, YGWC-24SA

Selenium (mg/L)
YAMW-2, YGWC-43, YGWC-24SA

Thallium (mg/L)
YAMW-1, YAMW-2, YAMW-4, YAMW-5, YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43, PZ-35, PZ-37, YGWC-24SA, YGWC-36A

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:49 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**8/25/2021**	**1.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**8/26/2021**	**6.1**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**8/26/2021**	**3.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**8/25/2021**	**13.5**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**9/27/2021**	**0.64**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**8/26/2021**	**73.6**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**8/25/2021**	**79.9**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**YGWC-24SA**	**8.5**	**n/a**	**9/1/2021**	**8.9**	**Yes**	**312**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**8/26/2021**	**328**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**8/25/2021**	**500**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-38**	**222.7**	**n/a**	**8/26/2021**	**562**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**222.7**	**n/a**	**8/26/2021**	**225**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**222.7**	**n/a**	**8/25/2021**	**886**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:49 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**8/25/2021**	**1.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**8/26/2021**	**6.1**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**8/26/2021**	**3.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**8/25/2021**	**13.5**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**9/27/2021**	**0.64**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	9/1/2021	0.04ND	No	312	n/a	n/a	47.12	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-24SA	0.16	n/a	9/1/2021	0.04ND	No	312	n/a	n/a	47.12	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-36A	0.16	n/a	9/3/2021	0.012J	No	312	n/a	n/a	47.12	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	8/25/2021	10.6	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**8/26/2021**	**73.6**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	8/26/2021	12.8	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**8/25/2021**	**79.9**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	9/27/2021	4.1	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	9/1/2021	12.1	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24SA	37	n/a	9/1/2021	2.3	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-36A	37	n/a	9/3/2021	4.1	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	8.5	n/a	8/25/2021	2.5	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-38	8.5	n/a	8/26/2021	4.1	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-41	8.5	n/a	8/26/2021	3.6	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-42	8.5	n/a	8/25/2021	3.4	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-43	8.5	n/a	9/27/2021	1.1	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-49	8.5	n/a	9/1/2021	4.4	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	**YGWC-24SA**	**8.5**	**n/a**	**9/1/2021**	**8.9**	**Yes**	**312**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	YGWC-36A	8.5	n/a	9/3/2021	7	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-23S	0.68	n/a	8/25/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.68	n/a	8/26/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.68	n/a	8/26/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.68	n/a	8/25/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.68	n/a	9/27/2021	0.1	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.68	n/a	9/1/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24SA	0.68	n/a	9/1/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36A	0.68	n/a	9/3/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	8.39	4.4	8/25/2021	5.46	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	8.39	4.4	8/26/2021	4.54	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	8.39	4.4	8/26/2021	6.77	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-42	8.39	4.4	8/25/2021	6.73	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	8.39	4.4	9/27/2021	6.08	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	8.39	4.4	9/1/2021	5.15	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24SA	8.39	4.4	9/1/2021	5.22	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-36A	8.39	4.4	9/3/2021	5.06	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-23S	160	n/a	8/25/2021	68	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**8/26/2021**	**328**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-41	160	n/a	8/26/2021	117	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**8/25/2021**	**500**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-43	160	n/a	9/27/2021	56.5	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-49	160	n/a	9/1/2021	79.8	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24SA	160	n/a	9/1/2021	0.5ND	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-36A	160	n/a	9/3/2021	13.8	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-23S	222.7	n/a	8/25/2021	141	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**222.7**	**n/a**	**8/26/2021**	**562**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**222.7**	**n/a**	**8/26/2021**	**225**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**222.7**	**n/a**	**8/25/2021**	**886**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-43	222.7	n/a	9/27/2021	158	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-49	222.7	n/a	9/1/2021	163	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24SA	222.7	n/a	9/1/2021	96	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-36A	222.7	n/a	9/3/2021	89	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Appendix III Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:54 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-40 (bg)	-0.01963	-52	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-38	-4.078	-69	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-41	-2.814	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-42	-1.625	-50	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-43	0.6926	63	48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-47 (bg)	-0.000923	-50	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.12	74	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.07527	-79	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.218	82	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.169	-74	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-38	-30.34	-77	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-42	-11.96	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-1.845	-69	-48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.423	71	53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.7142	68	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1058	-73	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.4027	92	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.1782	82	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.8704	-97	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.4824	-58	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.05961	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05007	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-24SA	0.4915	68	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.378	-51	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-10.75	-65	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.658	-104	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09609	85	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-38	-158	-80	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-42	-111.4	-62	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-21.6	-78	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	23.3	74	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.025	88	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.4885	74	63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-16.17	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-17	-86	-63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-210	-61	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-41	-126.2	-73	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-42	-167.8	-67	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-15.69	-67	-48	Yes	14	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:54 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	0	1	63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-30	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	0	0	63	No	17	17.65	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-13	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.005469	-53	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.004253	27	48	No	14	7.143	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWA-40 (bg)**	**-0.01963**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-4I (bg)	0	-11	-63	No	17	64.71	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0001974	14	63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-39	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.0679	-30	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-38**	**-4.078**	**-69**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-41**	**-2.814**	**-57**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-42**	**-1.625**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-43**	**0.6926**	**63**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWA-47 (bg)**	**-0.000923**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GWA-2 (bg)	0	11	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.0008768	-36	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0.00007668	10	63	No	17	29.41	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-18	-63	No	17	70.59	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-14	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-25	-63	No	17	82.35	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-1	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-21	-63	No	17	88.24	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.12**	**74**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.02122	10	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.07527**	**-79**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.06963	56	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.218**	**82**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	0.6588	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.8022	-47	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.2132	21	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-2.169**	**-74**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-5I (bg)	0.07389	58	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-30.34**	**-77**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWC-42**	**-11.96**	**-57**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-47 (bg)**	**-1.845**	**-69**	**-48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GWA-2 (bg)**	**4.423**	**71**	**53**	**Yes**	**15**	**6.667**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-14S (bg)	-0.01957	-45	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-1D (bg)**	**0.7142**	**68**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.1058**	**-73**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0.3107	22	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0	0	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.5989	46	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.5549	41	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.4027**	**92**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.06344	47	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2062	62	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.1782**	**82**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.1349	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.3996	26	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.2116	37	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1004	41	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.8704**	**-97**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:54 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	YGWA-5I (bg)	0	-3	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.4824**	**-58**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GWA-2 (bg)	0.1877	43	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1776	42	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	-0.002869	-40	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	-0.02701	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.04401	-47	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	-0.02202	-32	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.05961**	**-72**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-3I (bg)**	**-0.05007**	**-72**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWC-24SA**	**0.4915**	**68**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-17S (bg)	0.1098	59	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.1768	-60	-63	No	17	23.53	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1647	-50	-63	No	17	11.76	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	30	63	No	17	64.71	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.1968	-22	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-3.378**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-10.75**	**-65**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.1495	44	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-3.658**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.09609**	**85**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-158**	**-80**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-42**	**-111.4**	**-62**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-21.6**	**-78**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**23.3**	**74**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-14S (bg)	0.08247	21	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.025**	**88**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.2433	-23	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.4455	27	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.07072	-31	-63	No	17	11.76	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.4885**	**74**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-3I (bg)	1.181	61	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	5.4	32	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-1.272	-13	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	0.4413	9	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	3.135	31	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	13.94	56	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	25.58	41	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-40 (bg)**	**-16.17**	**-53**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	0.3992	4	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-5D (bg)**	**-17**	**-86**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	0	-1	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-38**	**-210**	**-61**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-41**	**-126.2**	**-73**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-42**	**-167.8**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWA-47 (bg)**	**-15.69**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GWA-2 (bg)	25.14	48	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	1.46	17	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	0.915	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-3.586	-32	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-2.761	-35	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	1.885	20	63	No	17	11.76	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	1.346	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	1.702	14	63	No	17	0	n/a	n/a	0.01	NP

Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/28/2021, 6:57 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0047	n/a	n/a	n/a	334	n/a	n/a	86.83	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	382	n/a	n/a	78.8	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	382	n/a	n/a	2.88	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	80.87	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	95.63	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	334	n/a	n/a	78.74	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	378	n/a	n/a	69.31	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	361	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	n/a	0.68	n/a	n/a	n/a	381	n/a	n/a	67.98	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	336	n/a	n/a	83.63	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	361	n/a	n/a	27.15	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	290	n/a	n/a	93.1	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	325	n/a	n/a	60	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	364	n/a	n/a	92.03	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	300	n/a	n/a	96.67	n/a	n/a	NaN	NP Inter(NDs)

YATES AMA-R6 GWPS					
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**Federal GWPS**	**State GWPS**
Antimony, Total (mg/L)	0.006		0.0047	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01
Barium, Total (mg/L)	2		0.071	2	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

Federal Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.01261	0.0002101	0.006	No	6	0.006128	0.009301	50	Kaplan-Meier	ln(x)	0.01	Param.
Antimony (mg/L)	YAMW-4	0.001325	0.0003728	0.006	No	4	0.001343	0.001127	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	YAMW-5	0.003	0.00033	0.006	No	4	0.002333	0.001335	75	Kaplan-Meier	No	0.0625	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	17	0.002568	0.0009666	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	14	0.002361	0.001078	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	14	0.002886	0.0004276	92.86	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	14	0.002824	0.0006601	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	14	0.002808	0.0007189	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	14	0.002688	0.0008013	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	6	0.002565	0.001066	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	12	0.002646	0.0008569	83.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	17	0.002876	0.0005093	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	17	0.0041	0.006318	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	YAMW-4	0.005	0.00079	0.01	No	4	0.002947	0.002372	50	None	No	0.0625	NP (normality)
Arsenic (mg/L)	YAMW-5	0.001914	0.0006656	0.01	No	4	0.003112	0.002191	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	19	0.0048	0.0008718	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00204	0.0007945	0.01	No	15	0.001651	0.001446	13.33	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	15	0.003021	0.002197	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-42	0.003008	0.001423	0.01	No	15	0.002291	0.001282	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	15	0.004147	0.001769	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.001	0.01	No	14	0.004104	0.001782	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	7	0.003807	0.002039	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	12	0.002412	0.001928	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	19	0.004816	0.000803	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	19	0.004092	0.001808	78.95	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06247	0.02668	2	No	7	0.04457	0.01506	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-2	0.01016	0.00639	2	No	4	0.008275	0.0008302	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-4	0.03323	-0.007731	2	No	4	0.01275	0.009021	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-5	0.06468	0.02232	2	No	4	0.0435	0.009327	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04532	0.03006	2	No	19	0.03769	0.01303	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02349	0.01804	2	No	15	0.02077	0.00402	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.0296	0.02029	2	No	15	0.02495	0.006866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04568	0.03134	2	No	15	0.03851	0.01058	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.0344	0.01678	2	No	15	0.02559	0.013	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07922	0.06936	2	No	14	0.07429	0.006962	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.067	0.032	2	No	7	0.04386	0.01475	0	None	No	0.008	NP (normality)
Barium (mg/L)	PZ-37	0.05638	0.0398	2	No	12	0.04809	0.01057	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	19	0.02076	0.00347	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04374	0.0322	2	No	19	0.03797	0.009852	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	7	0.0003604	0.0002	57.14	None	No	0.008	NP (NDs)
Beryllium (mg/L)	YAMW-2	0.0005	0.000051	0.004	No	4	0.000279	0.0002553	50	None	No	0.0625	NP (normality)
Beryllium (mg/L)	YAMW-5	0.0001844	0.00007802	0.004	No	5	0.0001312	0.00003174	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	19	0.0002098	0.0001808	26.32	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.0015	0.004	No	15	0.00288	0.0009518	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.00009	0.004	No	15	0.0003603	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.00029	0.004	No	15	0.00041	0.000147	40	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	14	0.0001393	0.0001047	7.143	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004523	0.0002517	0.004	No	8	0.000395	0.0001122	25	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003866	0.0002088	0.004	No	12	0.0003567	0.0001256	16.67	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	19	0.0001789	0.0001451	15.79	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.000322	0.0001979	0.004	No	19	0.0002599	0.000106	5.263	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	7	0.00031	0.0001806	42.86	None	No	0.008	NP (normality)
Cadmium (mg/L)	YAMW-5	0.0002803	0.0001297	0.005	No	4	0.000205	0.00003317	0	None	No	0.01	Param.

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	19	0.0004774	0.00009865	94.74	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.0029	0.0014	0.005	No	15	0.002267	0.0006747	0	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	15	0.0003027	0.0001496	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.0002	0.005	No	15	0.0003847	0.0001638	46.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	14	0.0004693	0.0001149	92.86	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	7	0.0004514	0.0001285	85.71	None	No	0.008	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006865	0.0002751	0.005	No	12	0.0005117	0.0002597	16.67	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	19	0.0002568	0.000153	26.32	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.005	0.00058	0.1	No	5	0.001616	0.001898	20	None	No	0.031	NP (normality)
Chromium (mg/L)	YAMW-2	0.003819	-0.0008143	0.1	No	4	0.001503	0.00102	0	None	No	0.01	Param.
Chromium (mg/L)	YAMW-4	0.005	0.00057	0.1	No	4	0.003892	0.002215	75	None	No	0.0625	NP (NDs)
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	15	0.003409	0.002034	60	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	15	0.00441	0.001557	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	15	0.004693	0.00119	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	15	0.004155	0.001757	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	15	0.003838	0.001995	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	13	0.001962	0.0009421	7.692	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.005	0.0006	0.1	No	5	0.001622	0.001904	20	None	No	0.031	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	12	0.004133	0.001581	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	15	0.004209	0.001637	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	15	0.004099	0.001656	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02746	0.006788	0.035	No	8	0.01712	0.01043	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YAMW-2	0.0025	0.00082	0.035	No	4	0.001313	0.0007951	0	None	No	0.0625	NP (normality)
Cobalt (mg/L)	YAMW-4	0.001222	0.00005821	0.035	No	4	0.00064	0.0002563	0	None	No	0.01	Param.
Cobalt (mg/L)	YAMW-5	0.005	0.00077	0.035	No	4	0.003942	0.002115	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	15	0.003826	0.002023	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	15	0.002147	0.0008847	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	15	0.003367	0.001688	46.67	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	14	0.00375	0.002052	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	7	0.005129	0.0003402	85.71	None	No	0.008	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01233	0.0046	0.035	No	12	0.008467	0.004928	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	19	0.003826	0.00202	73.68	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.818	0.307	6.92	No	6	0.5625	0.186	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-2	1.123	-0.1743	6.92	No	4	0.4743	0.2857	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-4	1.882	-0.368	6.92	No	4	0.757	0.4955	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-5	1.811	0.1501	6.92	No	4	0.9805	0.3658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.7995	0.3742	6.92	No	19	0.5869	0.3632	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.275	0.578	6.92	No	15	0.9263	0.514	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.309	0.593	6.92	No	15	0.9873	0.5741	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.827	1.242	6.92	No	15	2.034	1.17	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.631	1.305	6.92	No	15	2.619	1.878	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.137	0.4963	6.92	No	14	0.8166	0.4522	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	0.968	0.1216	6.92	No	6	0.5448	0.3081	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	1.982	1.431	6.92	No	12	1.721	0.4054	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7697	0.4768	6.92	No	19	0.6233	0.25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.07	0.5501	6.92	No	19	0.8101	0.4439	0	None	No	0.01	Param.
Fluoride (mg/L)	YAMW-4	0.14	0.1	4	No	4	0.12	0.02309	50	None	No	0.0625	NP (normality)
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	20	0.09495	0.01972	85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	16	0.1578	0.1148	62.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	16	0.1006	0.0025	87.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	16	0.08694	0.02537	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1096	0.05787	4	No	16	0.1065	0.05242	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.09	4	No	15	0.09933	0.02604	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	12	0.1708	0.1163	66.67	None	No	0.01	NP (NDs)

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	20	0.09655	0.01496	90	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	20	0.0928	0.03214	65	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.015	No	6	0.000865	0.0003307	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	YAMW-2	0.001	0.00008	0.015	No	4	0.0005475	0.0005226	50	None	No	0.0625	NP (normality)
Lead (mg/L)	YAMW-4	0.0007189	-0.0001082	0.015	No	4	0.000479	0.0003922	25	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	YAMW-5	0.0001563	0.00002421	0.015	No	4	0.000306	0.0004635	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	YGWC-23S	0.001	0.00044	0.015	No	17	0.0008133	0.0003546	76.47	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.015	No	15	0.00082	0.0003726	80	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.015	No	15	0.0007705	0.0004114	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.015	No	15	0.0007594	0.0004143	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.015	No	15	0.000877	0.0003246	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.015	No	14	0.0009328	0.0002515	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.015	No	6	0.0007062	0.0004556	66.67	None	No	0.0155	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.015	No	12	0.0006394	0.0004471	58.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.015	No	17	0.0009066	0.0002691	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0005018	0.0001591	0.015	No	17	0.0005253	0.0004283	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.02174	0.003485	0.04	No	7	0.01261	0.007686	14.29	None	No	0.01	Param.
Lithium (mg/L)	YAMW-4	0.04197	0.008528	0.04	No	4	0.02525	0.007365	0	None	No	0.01	Param.
Lithium (mg/L)	YAMW-5	0.01821	0.01179	0.04	No	4	0.015	0.001414	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.04	No	19	0.002974	0.002972	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008892	0.007522	0.04	No	15	0.008207	0.001011	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0021	0.04	No	15	0.004167	0.003124	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.04841	0.03111	0.04	No	15	0.03976	0.01276	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01858	0.01135	0.04	No	15	0.01497	0.005331	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.04	No	14	0.0037	0.0002386	0	None	No	0.01	NP (normality)
Lithium (mg/L)	PZ-35	0.015	0.001	0.04	No	7	0.004671	0.005813	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	PZ-37	0.03008	0.02287	0.04	No	12	0.02647	0.004592	8.333	None	No	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006697	0.003217	0.04	No	19	0.005235	0.003095	5.263	None	sqrt(x)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	14	0.0001891	0.00002942	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	12	0.0001764	0.00005584	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.000048	0.002	No	12	0.0001873	0.00004388	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.00009	0.002	No	12	0.0001785	0.00005086	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	11	0.0001819	0.00004396	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004477	0.001073	0.1	No	5	0.00422	0.003387	20	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YAMW-4	0.009642	0.003658	0.1	No	4	0.00665	0.001318	0	None	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00091	0.1	No	15	0.004952	0.004314	40	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.1	No	15	0.005713	0.004331	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.1	No	13	0.009285	0.002579	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.1	No	5	0.00838	0.003622	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.1	No	12	0.004508	0.00407	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.1	No	15	0.007267	0.003689	60	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	7	0.004229	0.001338	71.43	None	No	0.008	NP (NDs)
Selenium (mg/L)	YAMW-4	0.02107	-0.004906	0.05	No	5	0.00936	0.007619	40	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	YAMW-5	0.07376	0.02504	0.05	No	5	0.0494	0.01454	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.0392	0.02709	0.05	No	19	0.03314	0.01034	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06415	0.04156	0.05	No	15	0.05285	0.01667	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05636	0.04059	0.05	No	15	0.04847	0.01164	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.008799	0.006701	0.05	No	14	0.00775	0.001481	7.143	None	No	0.01	Param.
Selenium (mg/L)	PZ-35	0.005	0.0016	0.05	No	7	0.004514	0.001285	85.71	None	No	0.008	NP (NDs)
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.005	0.0019	0.05	No	19	0.003358	0.001411	36.84	None	No	0.01	NP (normality)

State Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 9:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Lithium (mg/L)	**YGWC-42**	**0.04841**	**0.03111**	**0.03**	**Yes**	**15**	**0.03976**	**0.01276**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 9:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.01261	0.0002101	0.006	No	6	0.006128	0.009301	50	Kaplan-Meier	ln(x)	0.01	Param.
Antimony (mg/L)	YAMW-4	0.001325	0.0003728	0.006	No	4	0.001343	0.001127	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	YAMW-5	0.003	0.00033	0.006	No	4	0.002333	0.001335	75	Kaplan-Meier	No	0.0625	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	17	0.002568	0.0009666	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	14	0.002361	0.001078	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	14	0.002886	0.0004276	92.86	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	14	0.002824	0.0006601	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	14	0.002808	0.0007189	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	14	0.002688	0.0008013	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	6	0.002565	0.001066	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	12	0.002646	0.0008569	83.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	17	0.002876	0.0005093	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	17	0.0041	0.006318	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	YAMW-4	0.005	0.00079	0.01	No	4	0.002947	0.002372	50	None	No	0.0625	NP (normality)
Arsenic (mg/L)	YAMW-5	0.001914	0.0006656	0.01	No	4	0.003112	0.002191	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	19	0.0048	0.0008718	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00204	0.0007945	0.01	No	15	0.001651	0.001446	13.33	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	15	0.003021	0.002197	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-42	0.003008	0.001423	0.01	No	15	0.002291	0.001282	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	15	0.004147	0.001769	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.001	0.01	No	14	0.004104	0.001782	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	7	0.003807	0.002039	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	12	0.002412	0.001928	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	19	0.004816	0.000803	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	19	0.004092	0.001808	78.95	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06247	0.02668	2	No	7	0.04457	0.01506	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-2	0.01016	0.00639	2	No	4	0.008275	0.0008302	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-4	0.03323	-0.007731	2	No	4	0.01275	0.009021	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-5	0.06468	0.02232	2	No	4	0.0435	0.009327	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04532	0.03006	2	No	19	0.03769	0.01303	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02349	0.01804	2	No	15	0.02077	0.00402	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.0296	0.02029	2	No	15	0.02495	0.006866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04568	0.03134	2	No	15	0.03851	0.01058	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.0344	0.01678	2	No	15	0.02559	0.013	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07922	0.06936	2	No	14	0.07429	0.006962	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.067	0.032	2	No	7	0.04386	0.01475	0	None	No	0.008	NP (normality)
Barium (mg/L)	PZ-37	0.05638	0.0398	2	No	12	0.04809	0.01057	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	19	0.02076	0.00347	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04374	0.0322	2	No	19	0.03797	0.009852	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	7	0.0003604	0.0002	57.14	None	No	0.008	NP (NDs)
Beryllium (mg/L)	YAMW-2	0.0005	0.000051	0.004	No	4	0.000279	0.0002553	50	None	No	0.0625	NP (normality)
Beryllium (mg/L)	YAMW-5	0.0001844	0.00007802	0.004	No	5	0.0001312	0.00003174	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	19	0.0002098	0.0001808	26.32	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.0015	0.004	No	15	0.00288	0.0009518	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.00009	0.004	No	15	0.0003603	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.00029	0.004	No	15	0.00041	0.000147	40	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	14	0.0001393	0.0001047	7.143	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004523	0.0002517	0.004	No	8	0.000395	0.0001122	25	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003866	0.0002088	0.004	No	12	0.0003567	0.0001256	16.67	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	19	0.0001789	0.0001451	15.79	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.000322	0.0001979	0.004	No	19	0.0002599	0.000106	5.263	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	7	0.00031	0.0001806	42.86	None	No	0.008	NP (normality)
Cadmium (mg/L)	YAMW-5	0.0002803	0.0001297	0.005	No	4	0.000205	0.00003317	0	None	No	0.01	Param.

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 9:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	19	0.0004774	0.00009865	94.74	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.0029	0.0014	0.005	No	15	0.002267	0.0006747	0	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	15	0.0003027	0.0001496	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.0002	0.005	No	15	0.0003847	0.0001638	46.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	14	0.0004693	0.0001149	92.86	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	7	0.0004514	0.0001285	85.71	None	No	0.008	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006865	0.0002751	0.005	No	12	0.0005117	0.0002597	16.67	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	19	0.0002568	0.000153	26.32	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.005	0.00058	0.1	No	5	0.001616	0.001898	20	None	No	0.031	NP (normality)
Chromium (mg/L)	YAMW-2	0.003819	-0.0008143	0.1	No	4	0.001503	0.00102	0	None	No	0.01	Param.
Chromium (mg/L)	YAMW-4	0.005	0.00057	0.1	No	4	0.003892	0.002215	75	None	No	0.0625	NP (NDs)
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	15	0.003409	0.002034	60	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	15	0.00441	0.001557	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	15	0.004693	0.00119	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	15	0.004155	0.001757	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	15	0.003838	0.001995	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	13	0.001962	0.0009421	7.692	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.005	0.0006	0.1	No	5	0.001622	0.001904	20	None	No	0.031	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	12	0.004133	0.001581	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	15	0.004209	0.001637	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	15	0.004099	0.001656	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02746	0.006788	0.035	No	8	0.01712	0.01043	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YAMW-2	0.0025	0.00082	0.035	No	4	0.001313	0.0007951	0	None	No	0.0625	NP (normality)
Cobalt (mg/L)	YAMW-4	0.001222	0.00005821	0.035	No	4	0.00064	0.0002563	0	None	No	0.01	Param.
Cobalt (mg/L)	YAMW-5	0.005	0.00077	0.035	No	4	0.003942	0.002115	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	15	0.003826	0.002023	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	15	0.002147	0.0008847	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	15	0.003367	0.001688	46.67	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	14	0.00375	0.002052	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	7	0.005129	0.0003402	85.71	None	No	0.008	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01233	0.0046	0.035	No	12	0.008467	0.004928	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	19	0.003826	0.00202	73.68	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.818	0.307	6.92	No	6	0.5625	0.186	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-2	1.123	-0.1743	6.92	No	4	0.4743	0.2857	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-4	1.882	-0.368	6.92	No	4	0.757	0.4955	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-5	1.811	0.1501	6.92	No	4	0.9805	0.3658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.7995	0.3742	6.92	No	19	0.5869	0.3632	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.275	0.578	6.92	No	15	0.9263	0.514	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.309	0.593	6.92	No	15	0.9873	0.5741	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.827	1.242	6.92	No	15	2.034	1.17	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.631	1.305	6.92	No	15	2.619	1.878	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.137	0.4963	6.92	No	14	0.8166	0.4522	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	0.968	0.1216	6.92	No	6	0.5448	0.3081	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	1.982	1.431	6.92	No	12	1.721	0.4054	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7697	0.4768	6.92	No	19	0.6233	0.25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.07	0.5501	6.92	No	19	0.8101	0.4439	0	None	No	0.01	Param.
Fluoride (mg/L)	YAMW-4	0.14	0.1	4	No	4	0.12	0.02309	50	None	No	0.0625	NP (normality)
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	20	0.09495	0.01972	85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	16	0.1578	0.1148	62.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	16	0.1006	0.0025	87.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	16	0.08694	0.02537	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1096	0.05787	4	No	16	0.1065	0.05242	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.09	4	No	15	0.09933	0.02604	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	12	0.1708	0.1163	66.67	None	No	0.01	NP (NDs)

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Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	20	0.09655	0.01496	90	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	20	0.0928	0.03214	65	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.0013	No	6	0.000865	0.0003307	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	YAMW-2	0.001	0.00008	0.0013	No	4	0.0005475	0.0005226	50	None	No	0.0625	NP (normality)
Lead (mg/L)	YAMW-4	0.0007189	-0.0001082	0.0013	No	4	0.000479	0.0003922	25	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	YAMW-5	0.0001563	0.00002421	0.0013	No	4	0.000306	0.0004635	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	YGWC-23S	0.001	0.00044	0.0013	No	17	0.0008133	0.0003546	76.47	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.0013	No	15	0.00082	0.0003726	80	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.0013	No	15	0.0007705	0.0004114	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.0013	No	15	0.0007594	0.0004143	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.0013	No	15	0.000877	0.0003246	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.0013	No	14	0.0009328	0.0002515	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.0013	No	6	0.0007062	0.0004556	66.67	None	No	0.0155	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.0013	No	12	0.0006394	0.0004471	58.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.0013	No	17	0.0009066	0.0002691	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0005018	0.0001591	0.0013	No	17	0.0005253	0.0004283	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.02174	0.003485	0.03	No	7	0.01261	0.007686	14.29	None	No	0.01	Param.
Lithium (mg/L)	YAMW-4	0.04197	0.008528	0.03	No	4	0.02525	0.007365	0	None	No	0.01	Param.
Lithium (mg/L)	YAMW-5	0.01821	0.01179	0.03	No	4	0.015	0.001414	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.03	No	19	0.002974	0.002972	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008892	0.007522	0.03	No	15	0.008207	0.001011	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0021	0.03	No	15	0.004167	0.003124	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	**YGWC-42**	**0.04841**	**0.03111**	**0.03**	**Yes**	**15**	**0.03976**	**0.01276**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	YGWC-43	0.01858	0.01135	0.03	No	15	0.01497	0.005331	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.03	No	14	0.0037	0.0002386	0	None	No	0.01	NP (normality)
Lithium (mg/L)	PZ-35	0.015	0.001	0.03	No	7	0.004671	0.005813	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	PZ-37	0.03008	0.02287	0.03	No	12	0.02647	0.004592	8.333	None	No	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006697	0.003217	0.03	No	19	0.005235	0.003095	5.263	None	sqrt(x)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	14	0.0001891	0.00002942	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	12	0.0001764	0.00005584	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.000048	0.002	No	12	0.0001873	0.00004388	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.00009	0.002	No	12	0.0001785	0.00005086	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	11	0.0001819	0.00004396	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004477	0.001073	0.014	No	5	0.00422	0.003387	20	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YAMW-4	0.009642	0.003658	0.014	No	4	0.00665	0.001318	0	None	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00091	0.014	No	15	0.004952	0.004314	40	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.014	No	15	0.005713	0.004331	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.014	No	13	0.009285	0.002579	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.014	No	5	0.00838	0.003622	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.014	No	12	0.004508	0.00407	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.014	No	15	0.007267	0.003689	60	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	7	0.004229	0.001338	71.43	None	No	0.008	NP (NDs)
Selenium (mg/L)	YAMW-4	0.02107	-0.004906	0.05	No	5	0.00936	0.007619	40	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	YAMW-5	0.07376	0.02504	0.05	No	5	0.0494	0.01454	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.0392	0.02709	0.05	No	19	0.03314	0.01034	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06415	0.04156	0.05	No	15	0.05285	0.01667	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05636	0.04059	0.05	No	15	0.04847	0.01164	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.008799	0.006701	0.05	No	14	0.00775	0.001481	7.143	None	No	0.01	Param.
Selenium (mg/L)	PZ-35	0.005	0.0016	0.05	No	7	0.004514	0.001285	85.71	None	No	0.008	NP (NDs)
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.005	0.0019	0.05	No	19	0.003358	0.001411	36.84	None	No	0.01	NP (normality)

Appendix IV Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 1:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	**YGWA-20S (bg)**	**-0.0005785**	**-104**	**-81**	**Yes**	**20**	**50**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	**YGWC-38**	**-0.0007794**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-18I (bg)**	**-0.0004282**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-39 (bg)**	**0.001331**	**86**	**58**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWC-42**	**0.007174**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-47 (bg)**	**-0.0004228**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-30I (bg)**	**-0.009773**	**-86**	**-81**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3D (bg)**	**0.000976**	**99**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3I (bg)**	**0.001062**	**88**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWA-17S (bg)**	**0.0007074**	**88**	**74**	**Yes**	**19**	**68.42**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWC-38**	**-0.05831**	**-94**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV Trend Tests - All Results

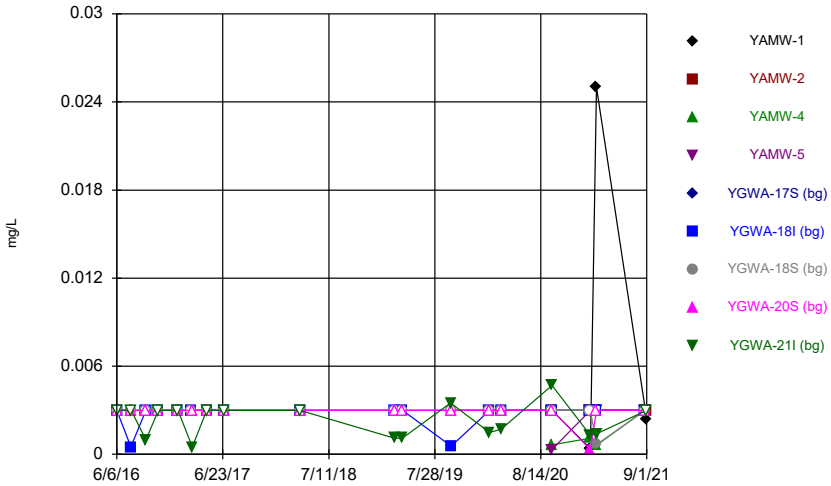
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 1:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	YGWA-17S (bg)	-0.00001866	-72	-74	No	19	42.11	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-18I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-18S (bg)	-0.0006066	-62	-81	No	20	45	n/a	n/a	0.01	NP
Beryllium (mg/L)	**YGWA-20S (bg)**	**-0.0005785**	**-104**	**-81**	**Yes**	**20**	**50**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	YGWA-21I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-39 (bg)	0	-11	-58	No	16	93.75	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-40 (bg)	-0.00001614	-30	-58	No	16	12.5	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-4I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-5D (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-5I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	**YGWC-38**	**-0.0007794**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	YGWA-47 (bg)	0	-16	-43	No	13	69.23	n/a	n/a	0.01	NP
Beryllium (mg/L)	GWA-2 (bg)	0	0	191	No	36	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-14S (bg)	-0.000002446	-33	-68	No	18	11.11	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-1D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-1I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-2I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-30I (bg)	0	-15	-68	No	18	88.89	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-3D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-3I (bg)	0	-11	-68	No	18	94.44	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-17S (bg)	0	-3	-74	No	19	89.47	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-18I (bg)**	**-0.0004282**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	YGWA-18S (bg)	-0.0002108	-41	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-20S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-21I (bg)	0.00016	39	81	No	20	5	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-39 (bg)**	**0.001331**	**86**	**58**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	YGWA-40 (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-4I (bg)	-0.000182	-32	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-5D (bg)	0.0002654	63	81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-5I (bg)	0	-2	-81	No	20	10	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWC-42**	**0.007174**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-47 (bg)**	**-0.0004228**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	GWA-2 (bg)	-0.0004067	-22	-53	No	15	40	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-14S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-1D (bg)	-0.0006682	-41	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-1I (bg)	0	-31	-81	No	20	15	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-2I (bg)	-0.0002795	-42	-81	No	20	10	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-30I (bg)**	**-0.009773**	**-86**	**-81**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3D (bg)**	**0.000976**	**99**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3I (bg)**	**0.001062**	**88**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWA-17S (bg)**	**0.0007074**	**88**	**74**	**Yes**	**19**	**68.42**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-18I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-18S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-20S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-21I (bg)	0	35	81	No	20	90	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-39 (bg)	0	1	58	No	16	93.75	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-40 (bg)	-0.0006615	-31	-58	No	16	37.5	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-4I (bg)	0	1	81	No	20	90	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-5D (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-5I (bg)	0	17	81	No	20	95	n/a	n/a	0.01	NP
Selenium (mg/L)	**YGWC-38**	**-0.05831**	**-94**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-47 (bg)	0	15	34	No	11	81.82	n/a	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	191	No	36	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-14S (bg)	0	55	68	No	18	72.22	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-1D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-1I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-2I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-30I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-3D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-3I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	PZ-37	0.005682	5	38	No	12	0	n/a	n/a	0.01	NP

FIGURE A.

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

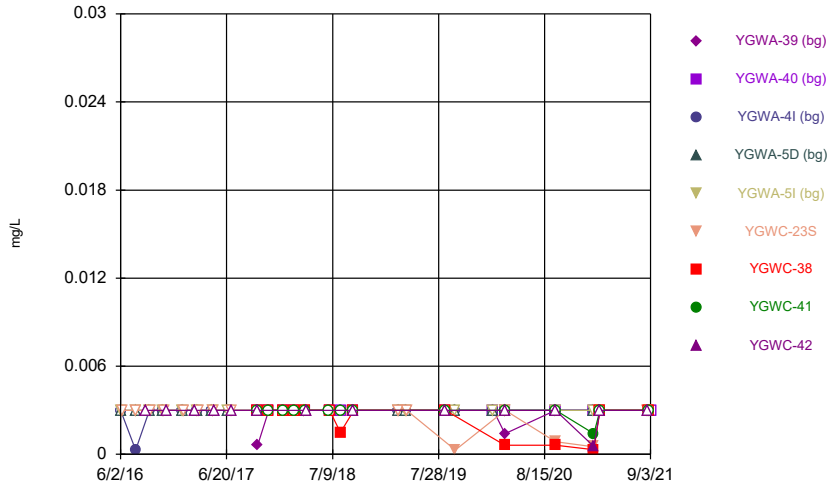
Time Series



Constituent: Antimony Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
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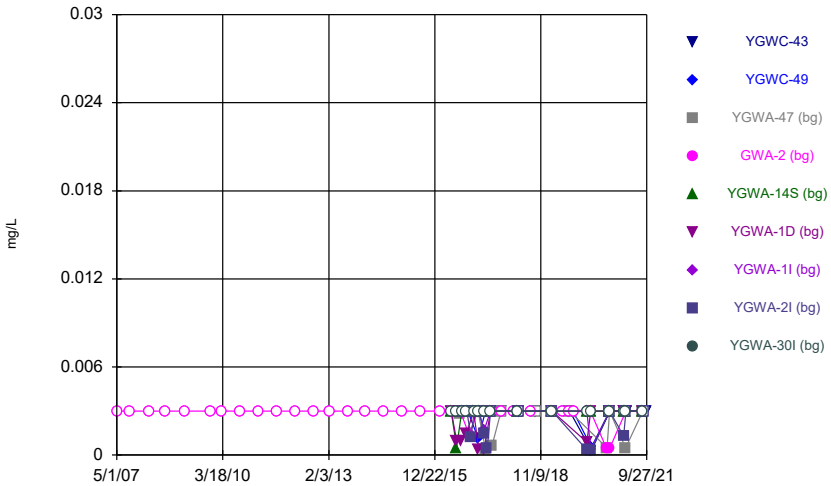

Constituent: Antimony Analysis Run 1/6/2022 12:00 PM
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Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
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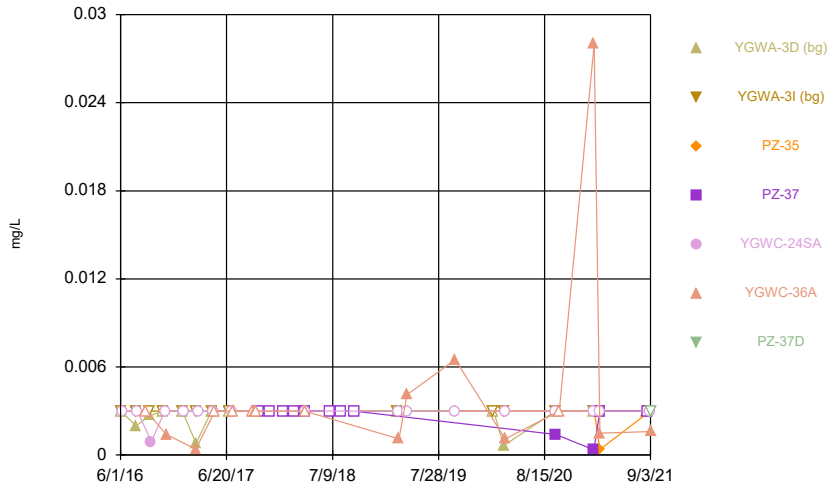
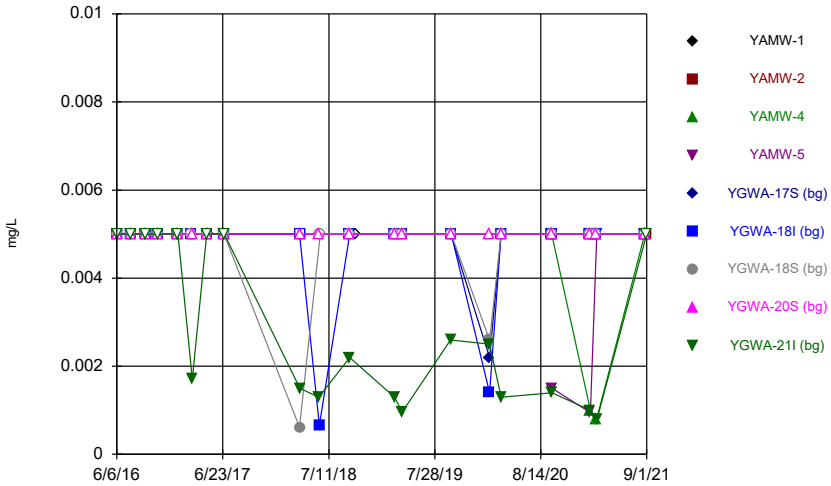
Time Series



Constituent: Antimony Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

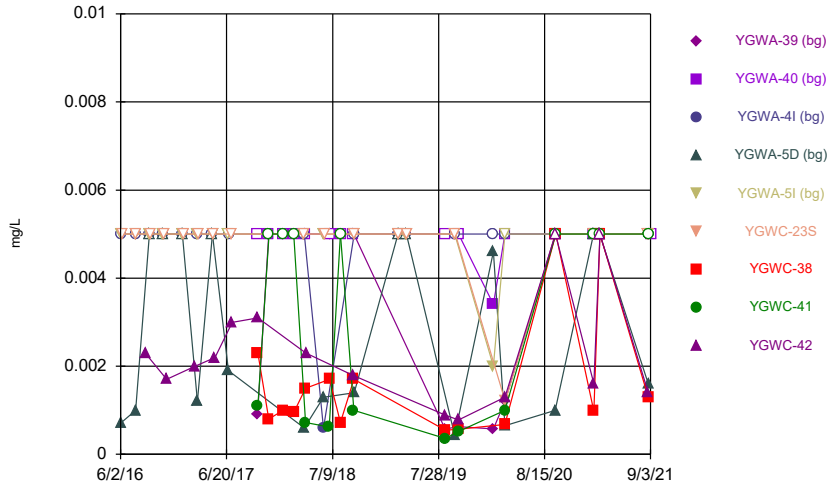
Time Series



Constituent: Arsenic Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

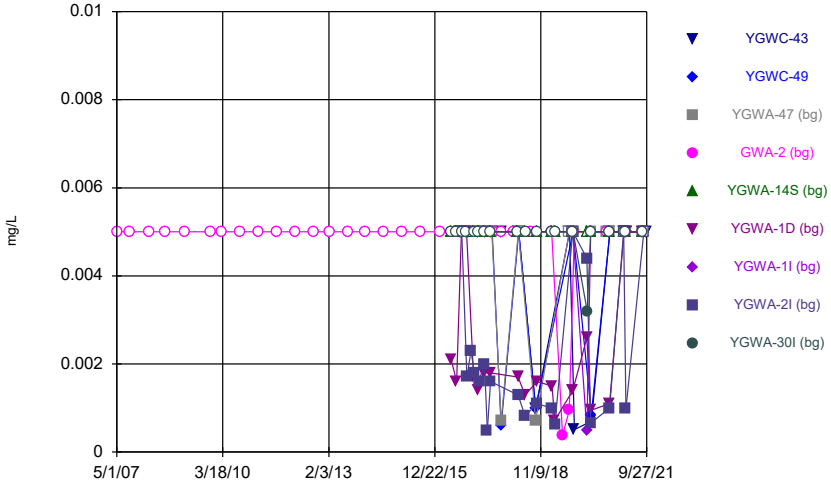
Time Series



Constituent: Arsenic Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

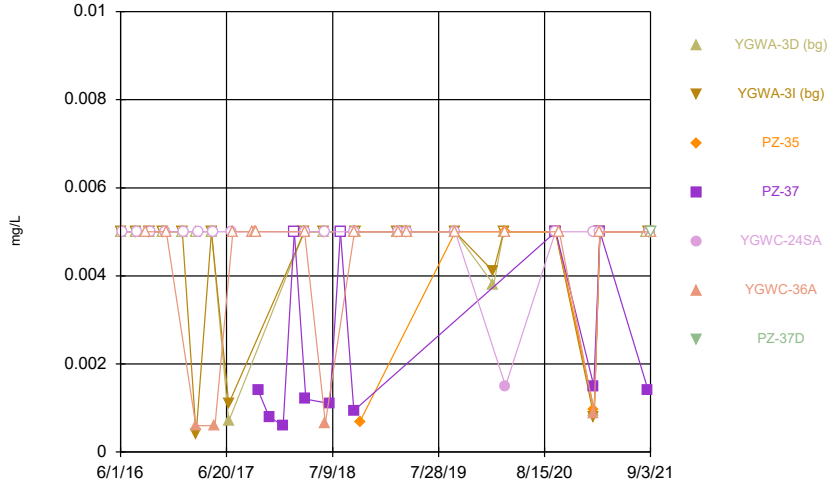
Time Series



Constituent: Arsenic Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

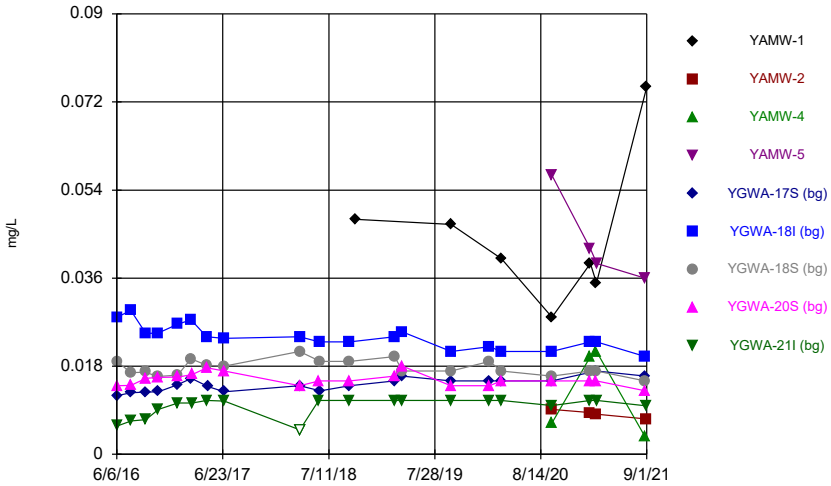
Time Series



Constituent: Arsenic Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

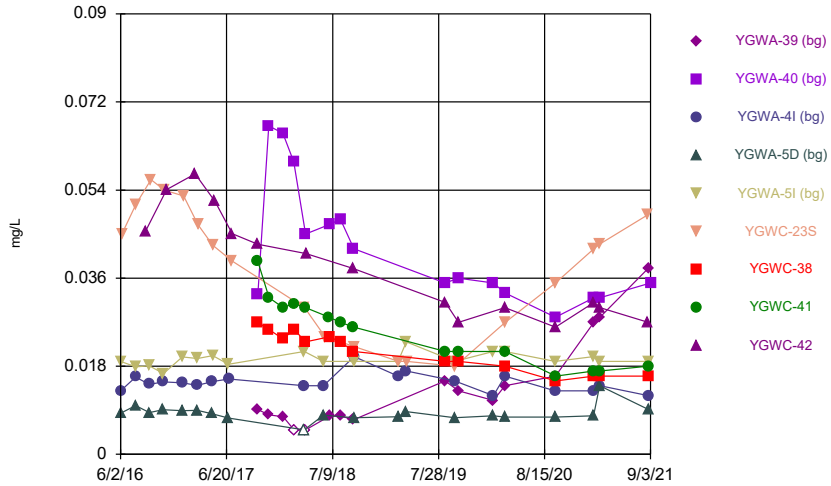
Time Series



Constituent: Barium Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

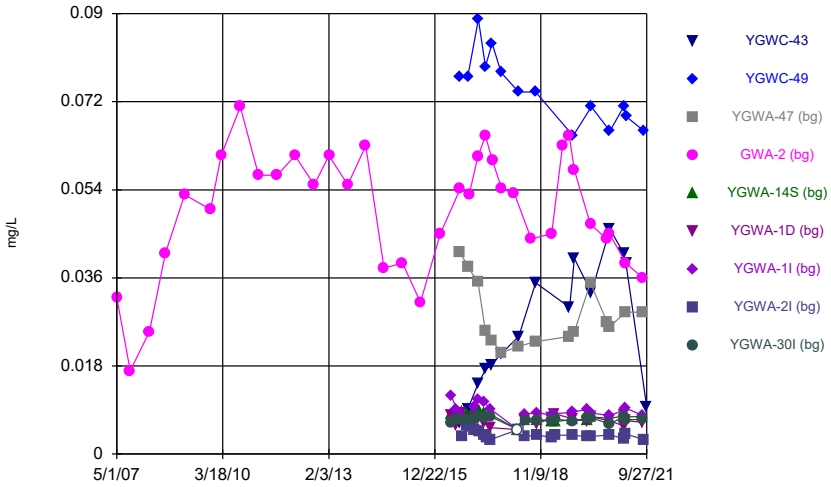
Time Series



Constituent: Barium Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

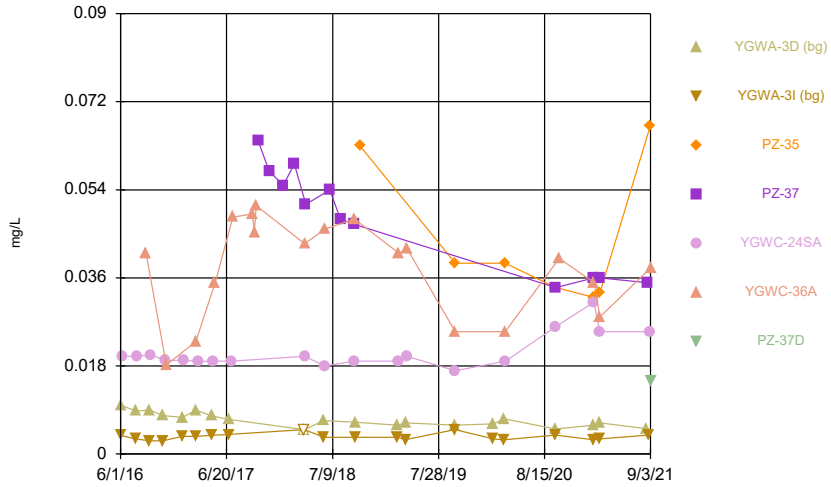
Time Series



Constituent: Barium Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

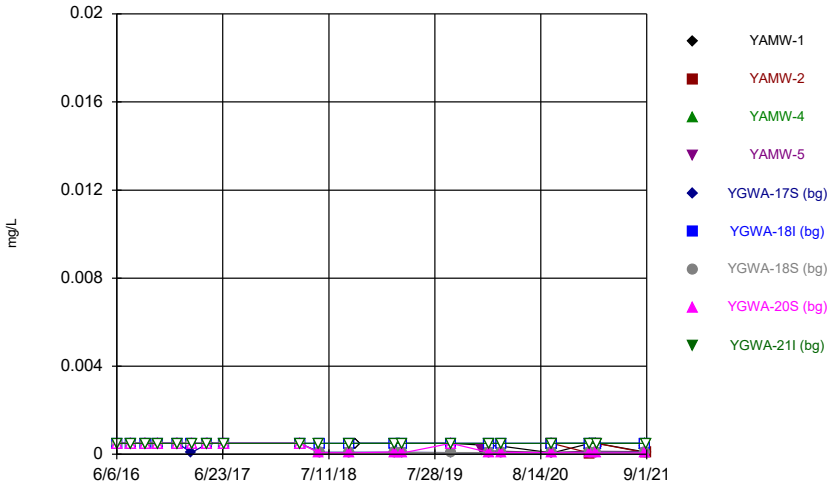
Time Series



Constituent: Barium Analysis Run 1/6/2022 12:00 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

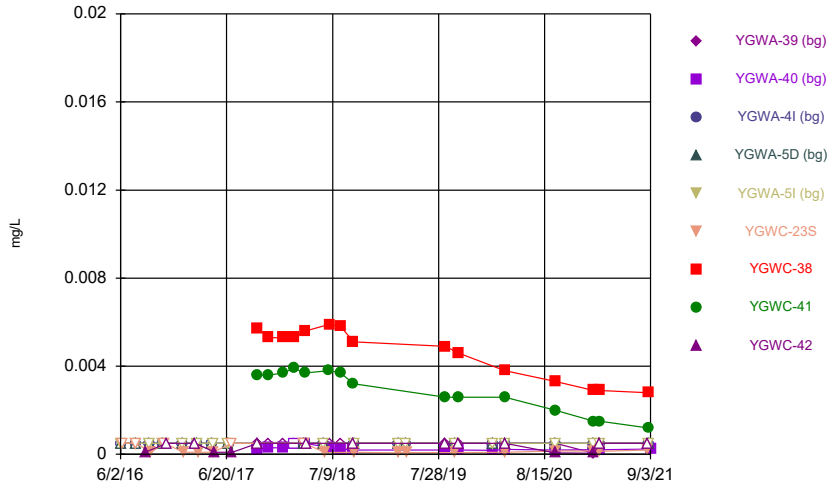
Time Series



Constituent: Beryllium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

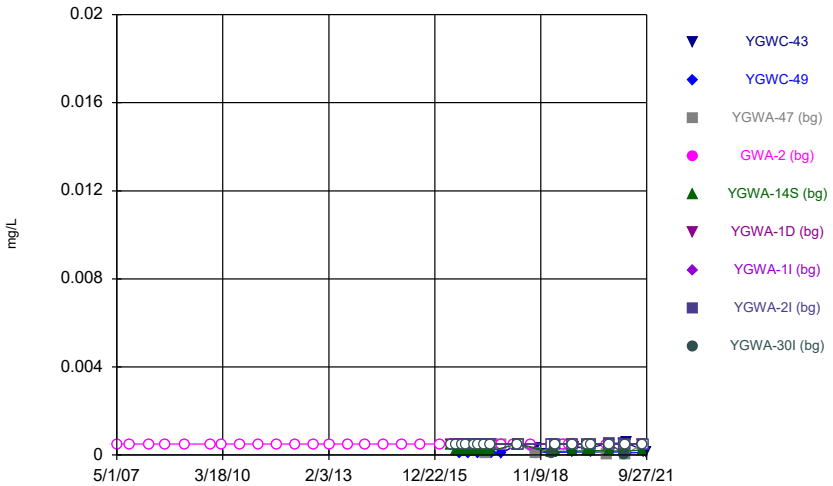
Time Series



Constituent: Beryllium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

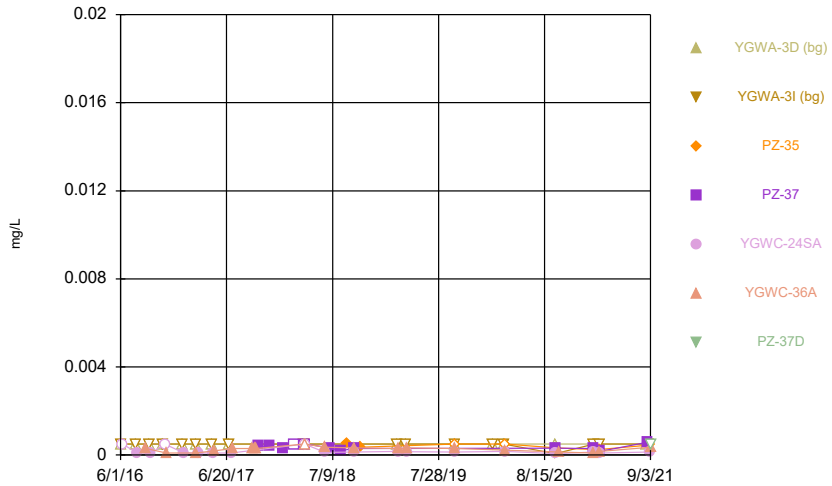
Time Series



Constituent: Beryllium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

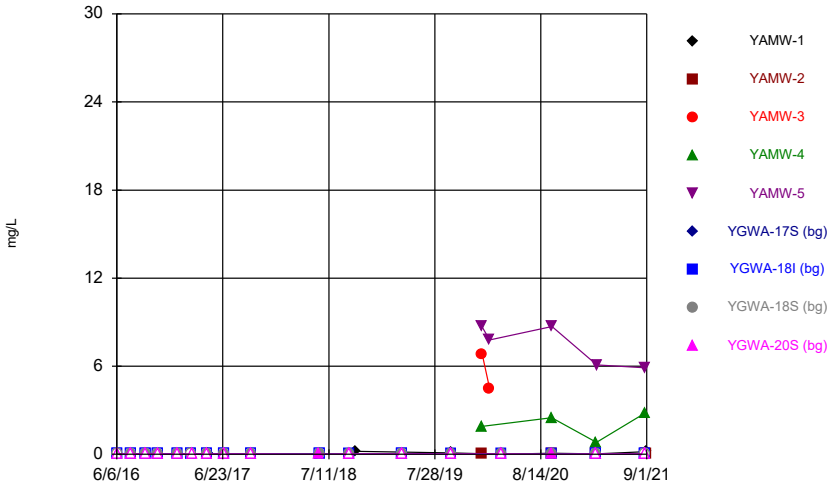
Time Series



Constituent: Beryllium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

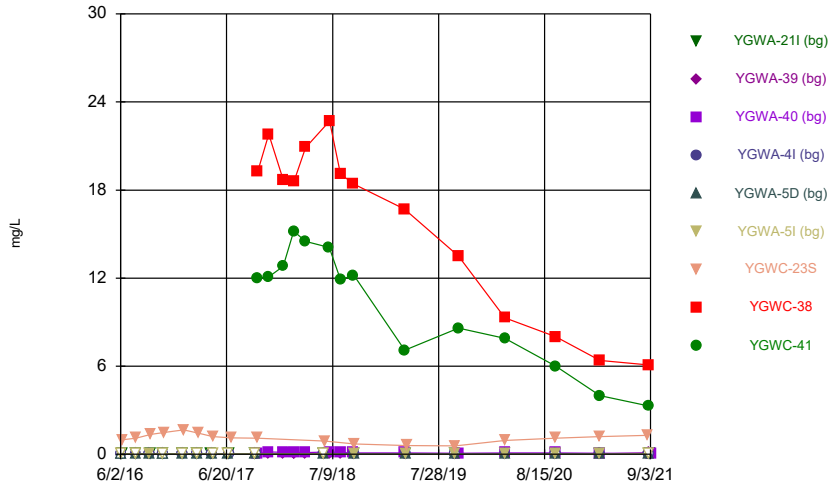
Time Series



Constituent: Boron Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

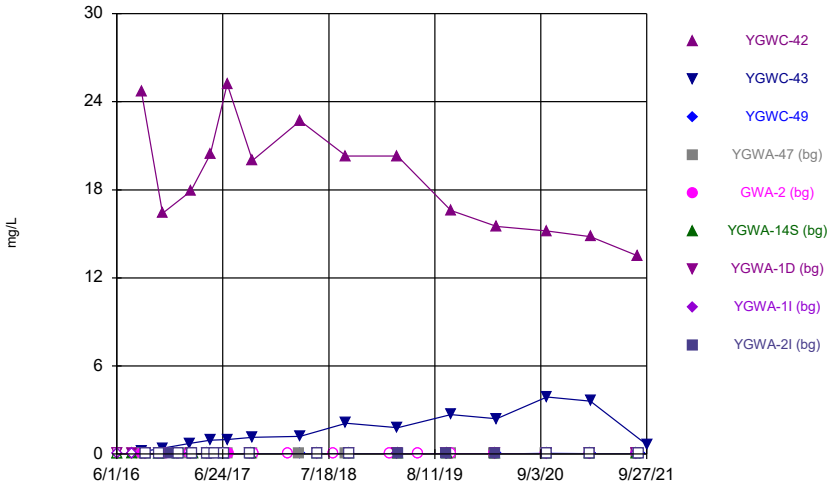
Time Series



Constituent: Boron Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

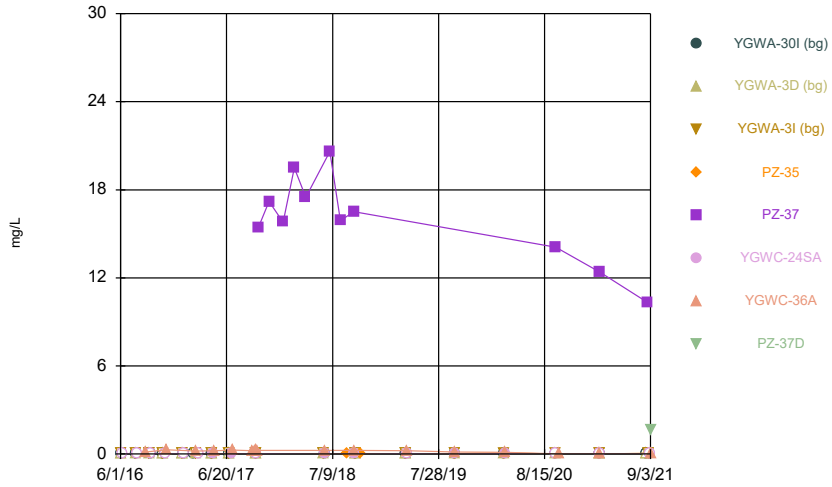
Time Series



Constituent: Boron Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

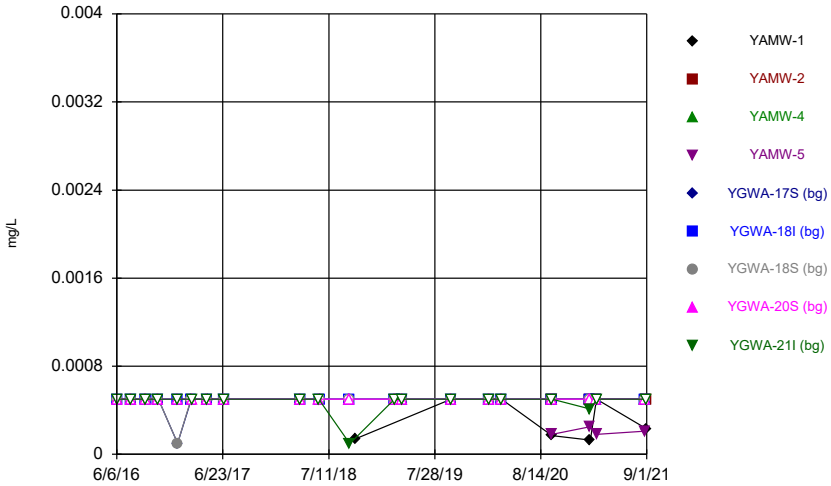
Time Series



Constituent: Boron Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

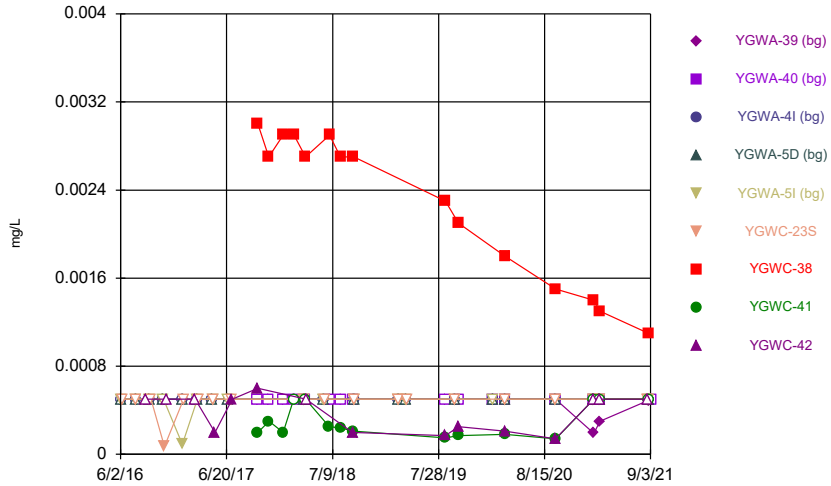
Time Series



Constituent: Cadmium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

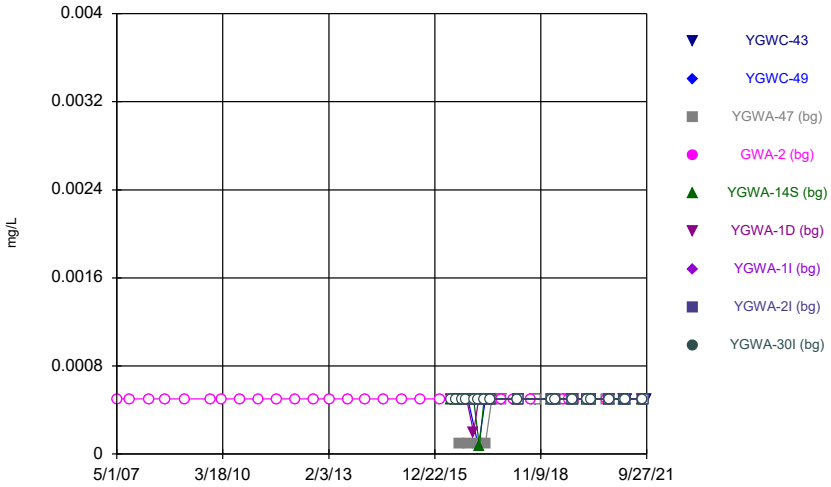
Time Series



Constituent: Cadmium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

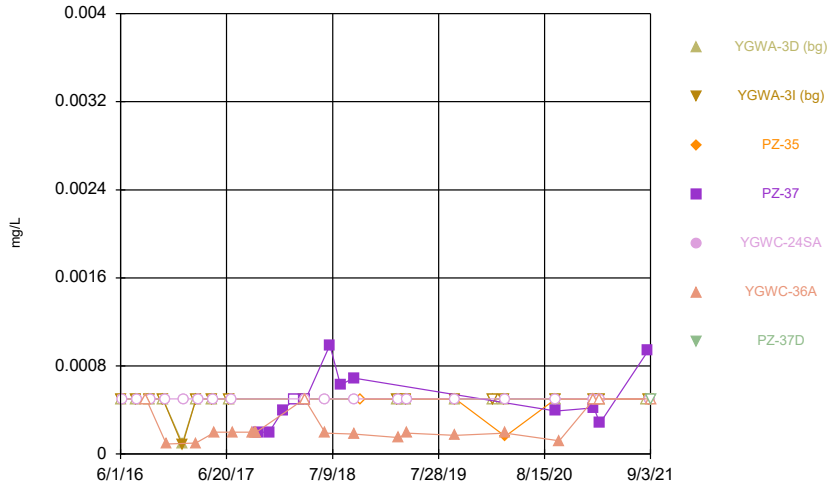
Time Series



Constituent: Cadmium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

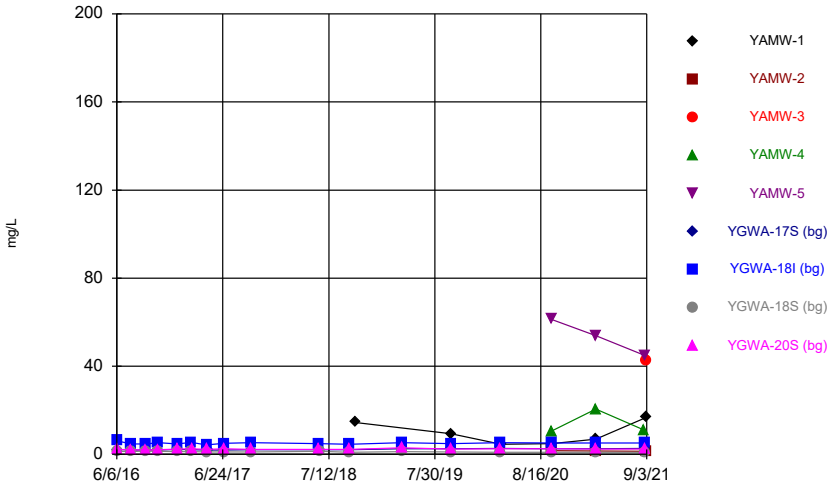
Time Series



Constituent: Cadmium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series



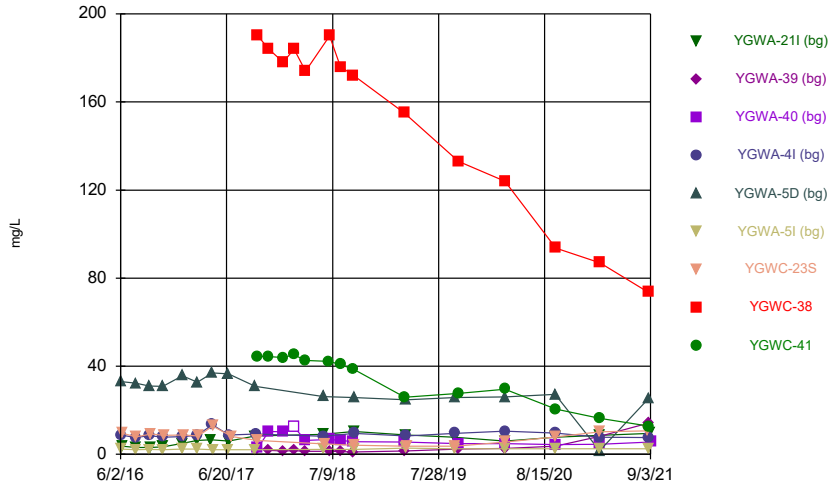
Constituent: Calcium Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



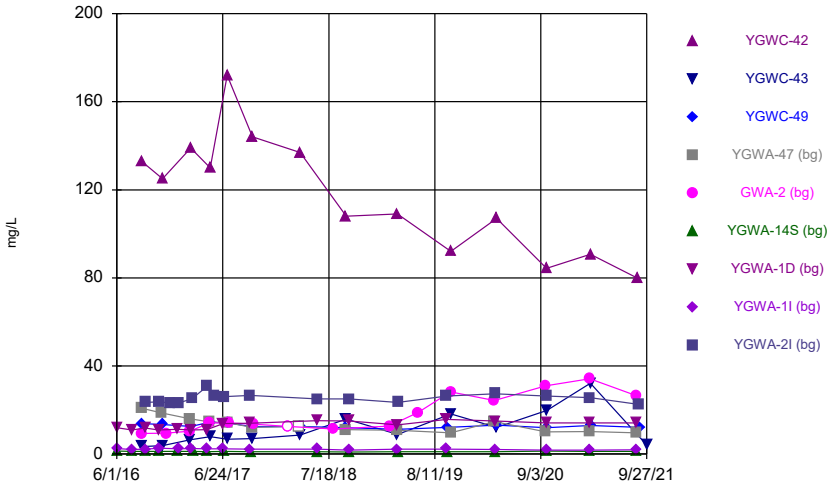
Constituent: Calcium Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

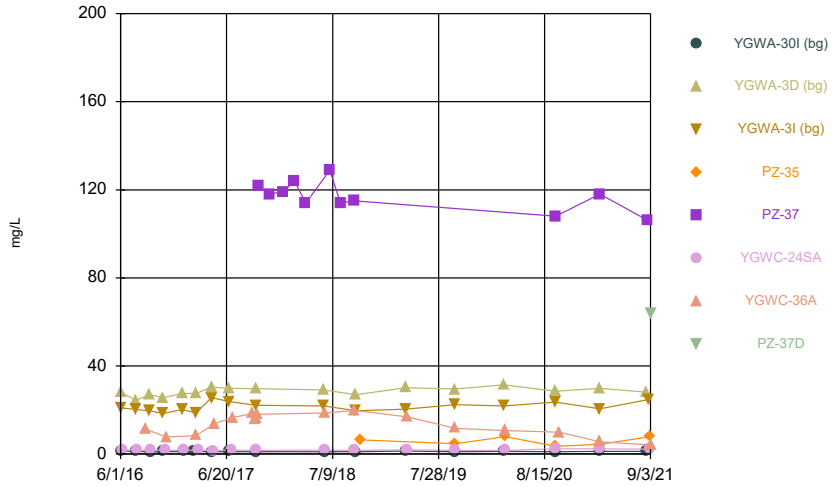


Constituent: Calcium Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

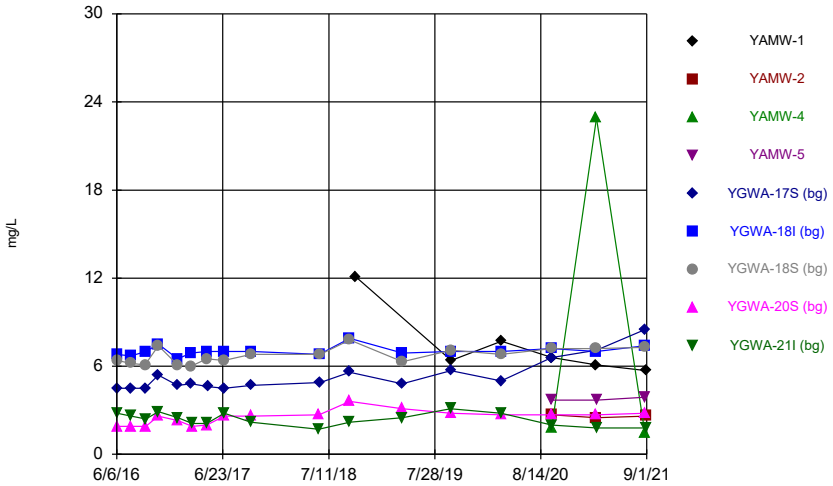


Constituent: Calcium Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

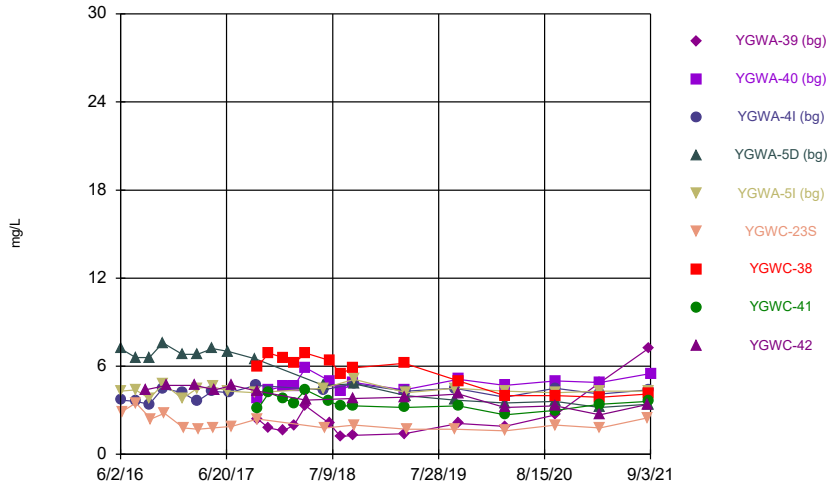


Constituent: Chloride Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

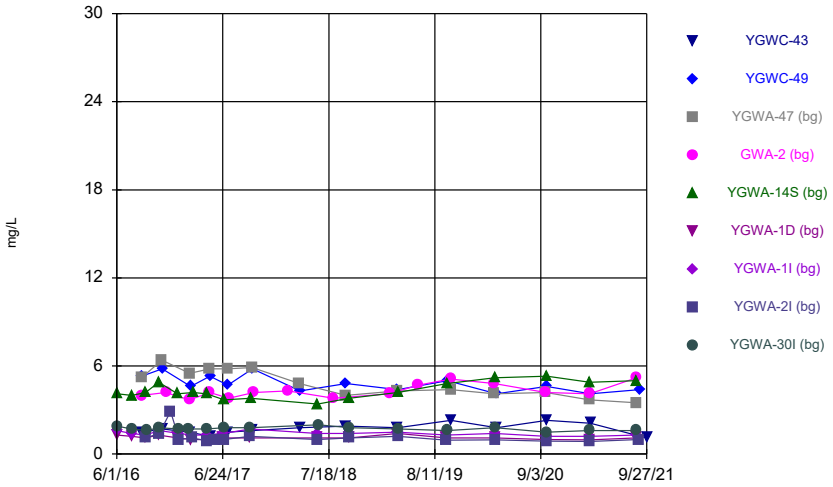


Constituent: Chloride Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

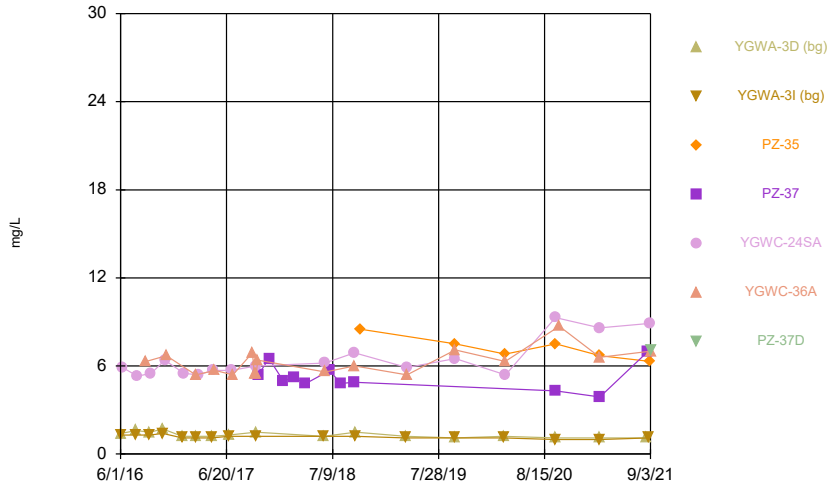


Constituent: Chloride Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

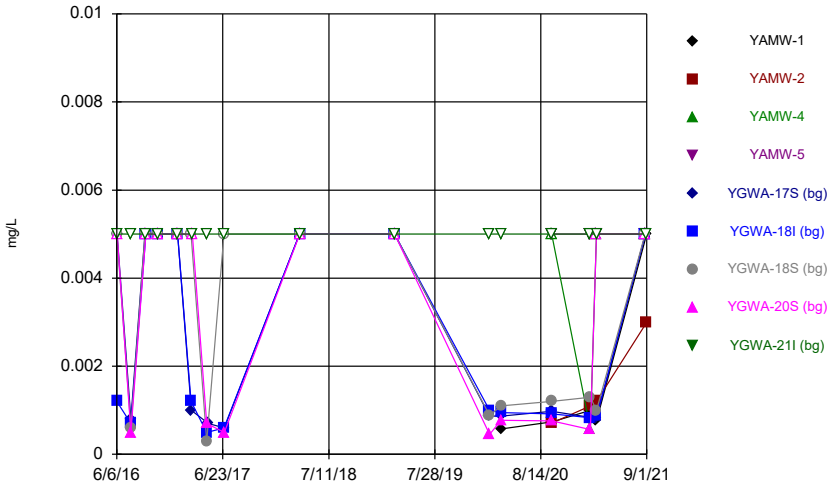


Constituent: Chloride Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

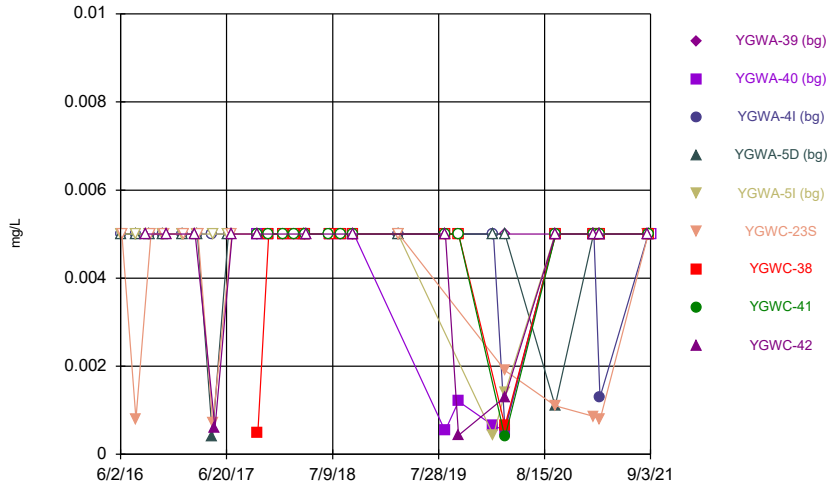
Time Series



Constituent: Chromium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

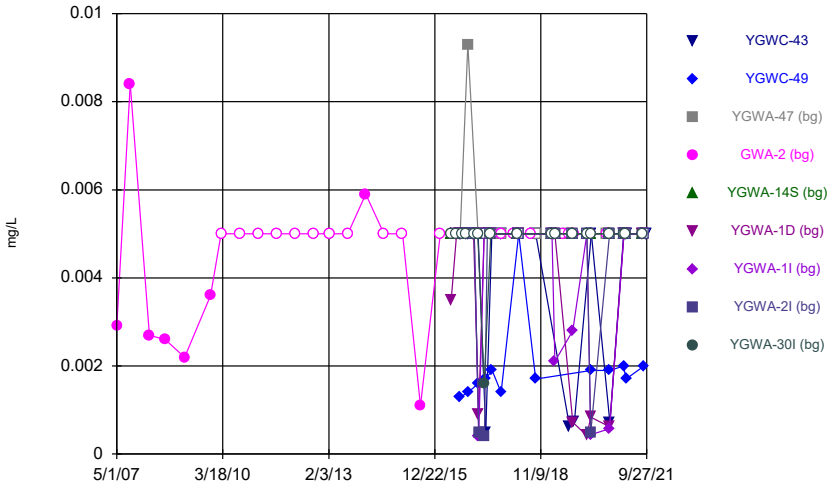
Time Series



Constituent: Chromium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

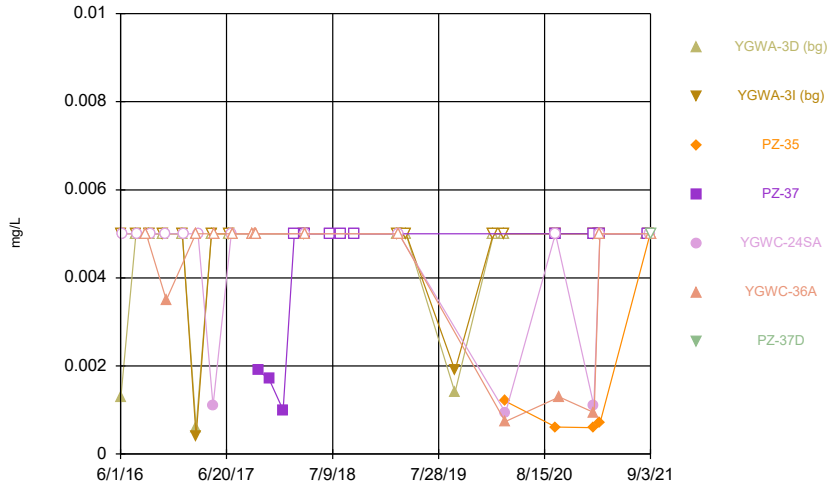
Time Series



Constituent: Chromium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

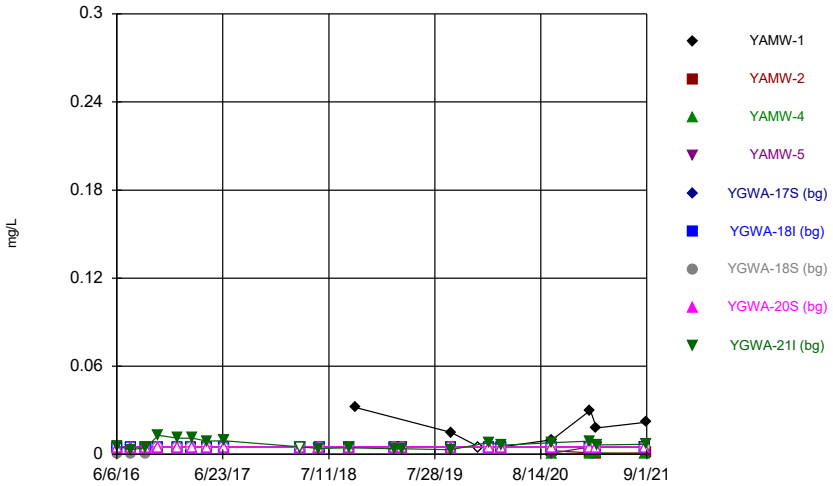
Time Series



Constituent: Chromium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

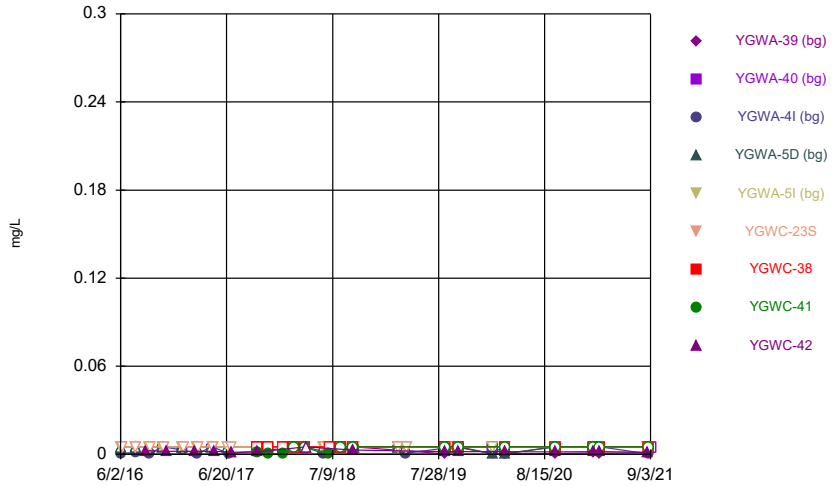
Time Series



Constituent: Cobalt Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

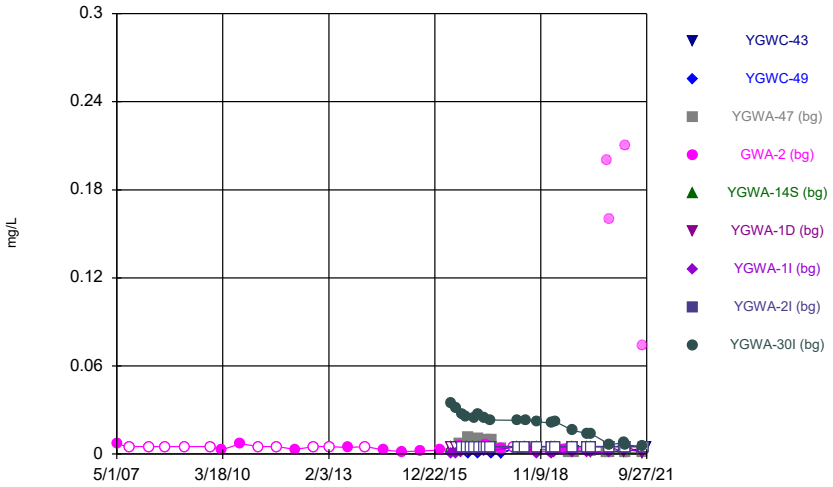
Time Series



Constituent: Cobalt Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

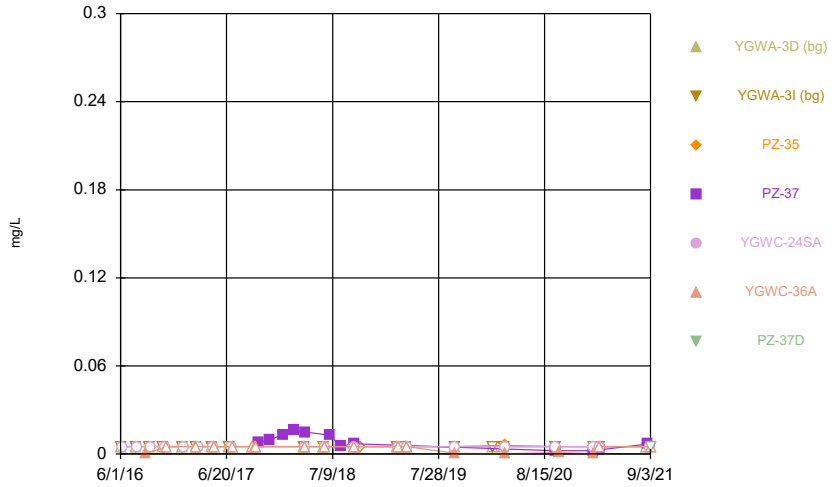
Time Series



Constituent: Cobalt Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

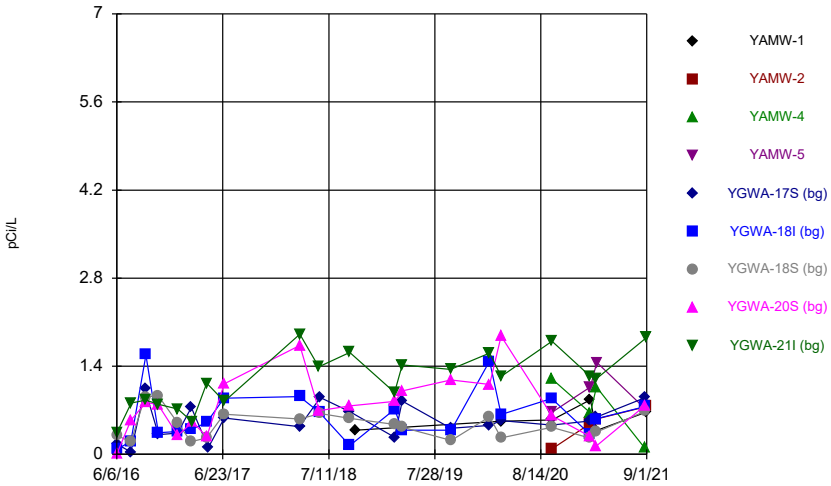
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cobalt Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

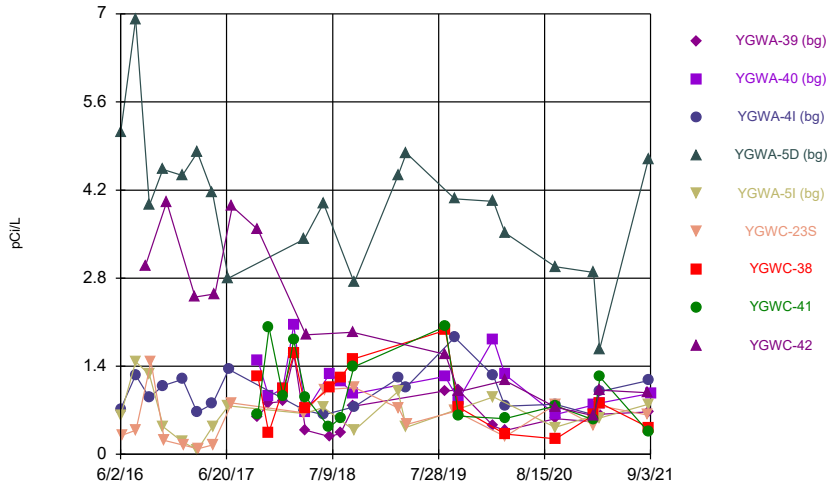
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

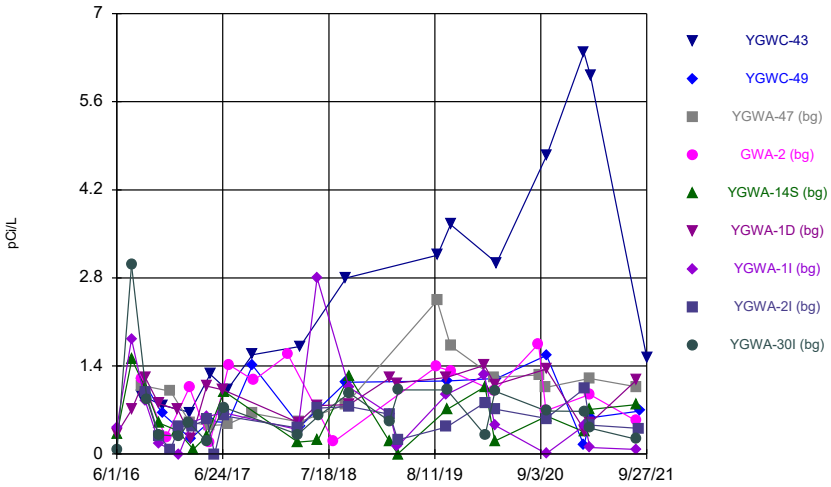
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

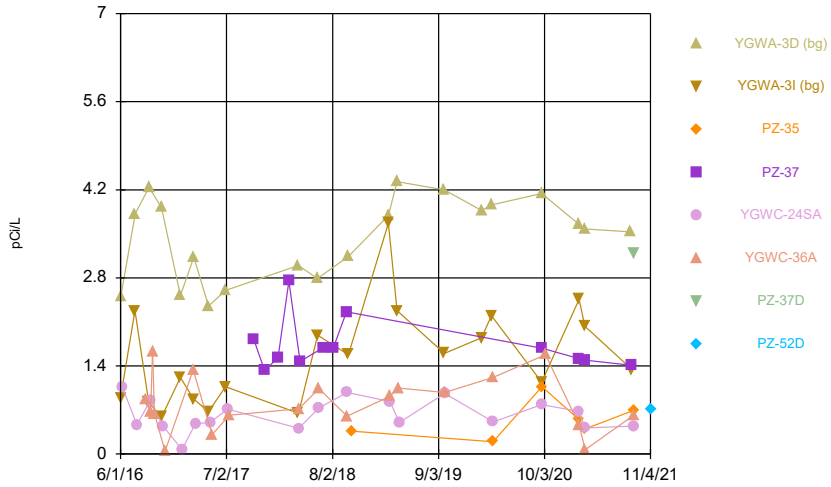
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

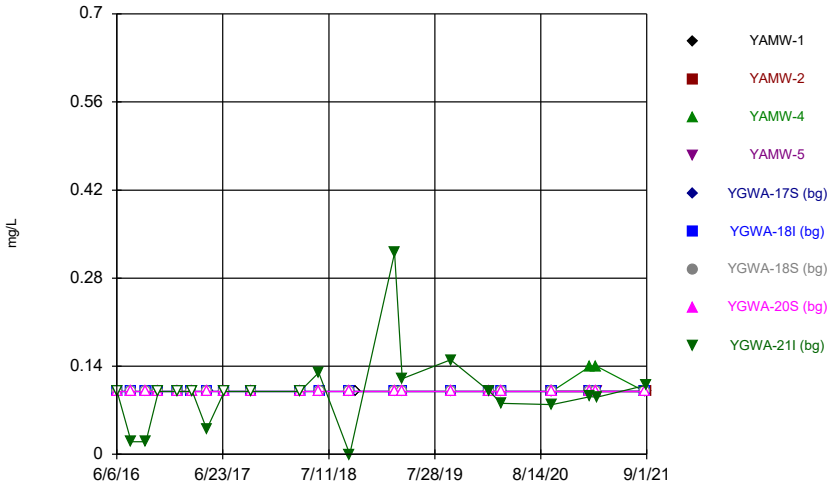
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

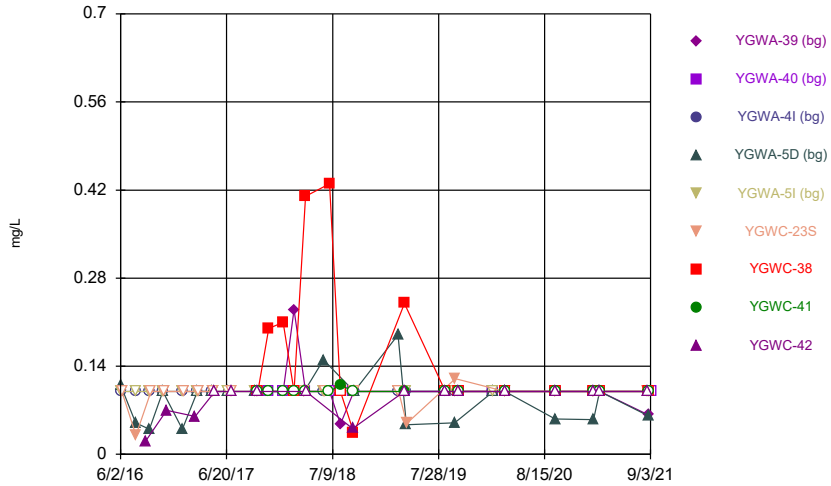
Time Series



Constituent: Fluoride Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

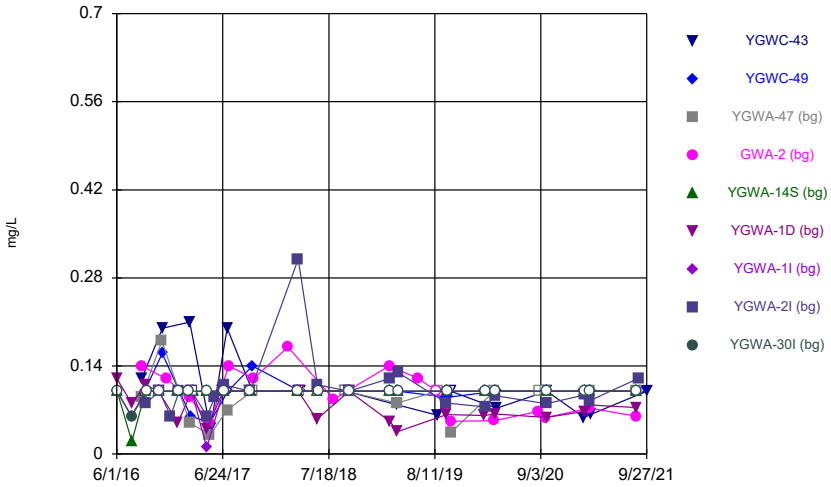
Time Series



Constituent: Fluoride Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

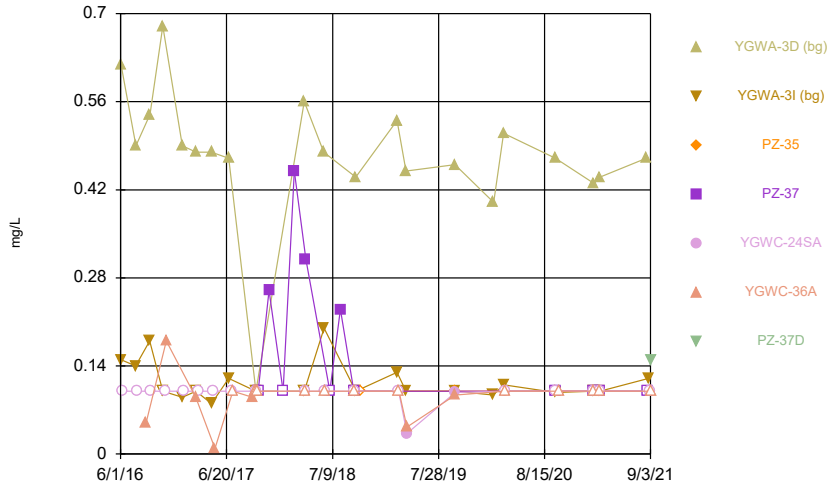
Time Series



Constituent: Fluoride Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

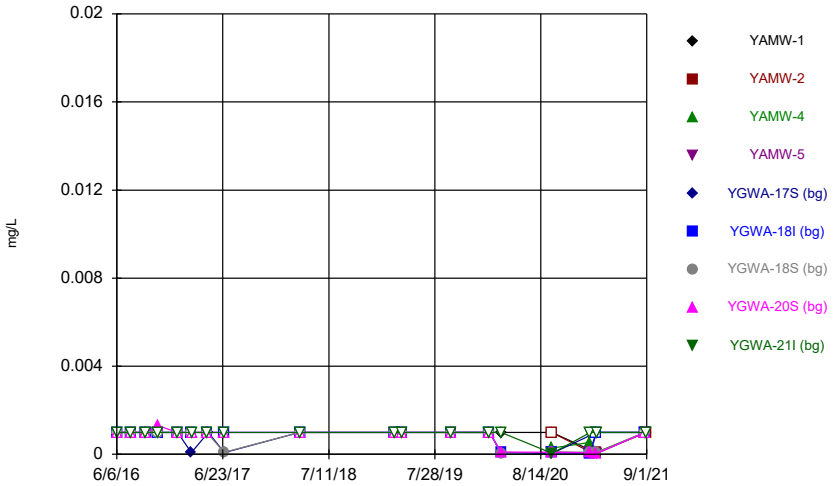
Time Series



Constituent: Fluoride Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

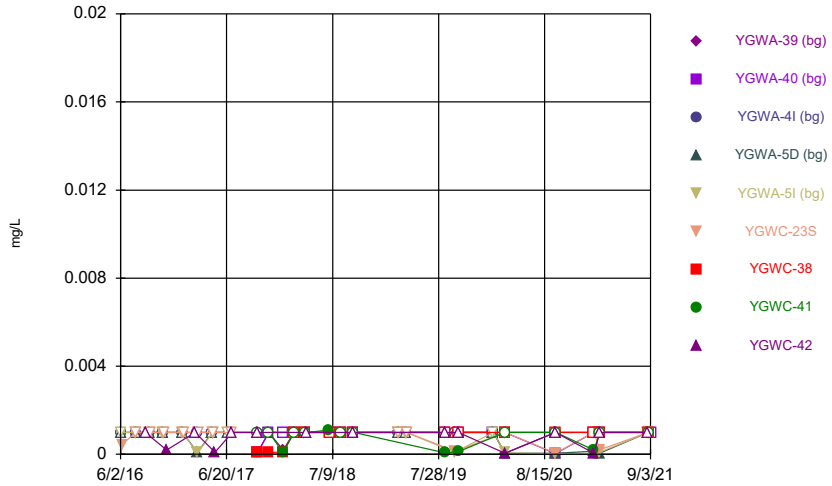
Time Series



Constituent: Lead Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

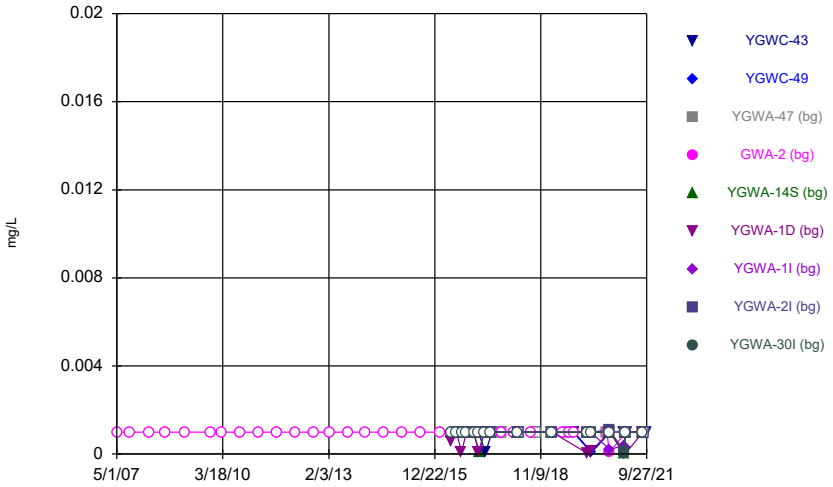
Time Series



Constituent: Lead Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

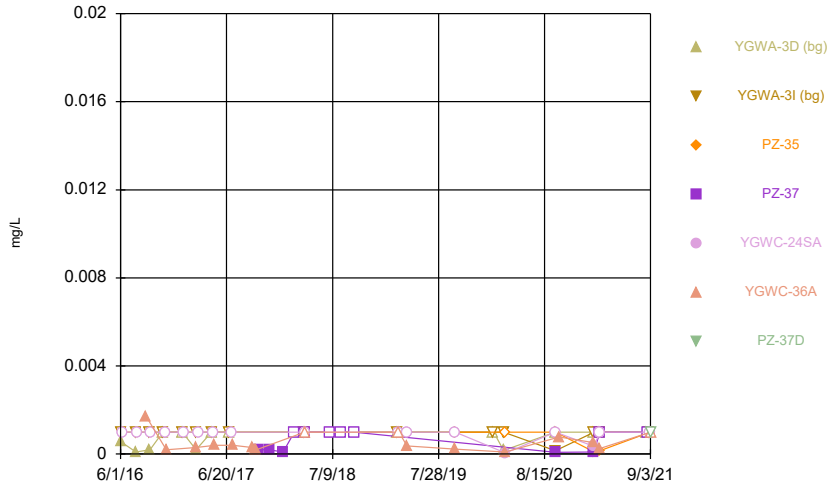
Time Series



Constituent: Lead Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

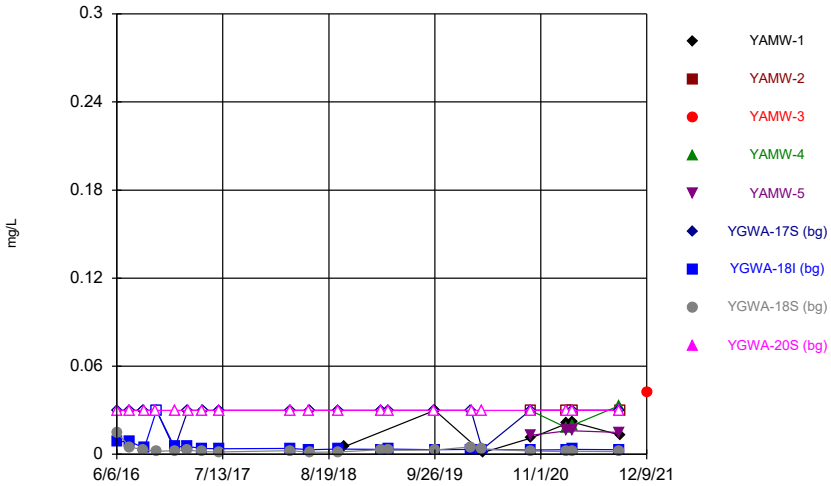
Time Series



Constituent: Lead Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

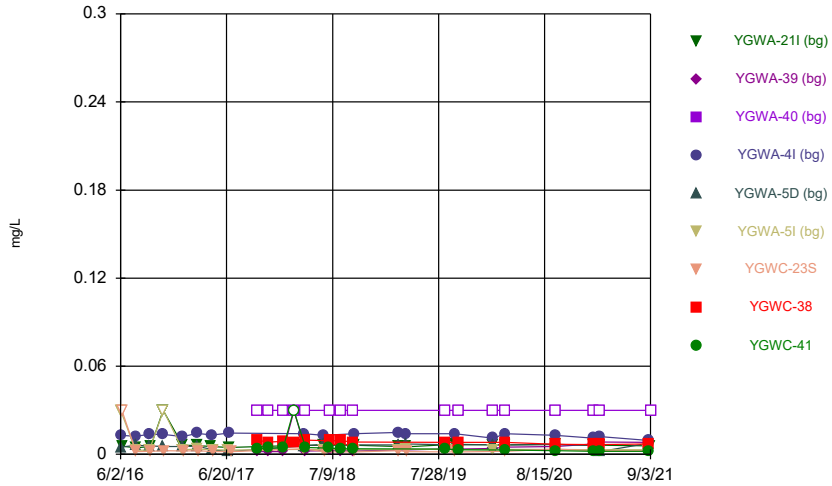
Time Series



Constituent: Lithium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

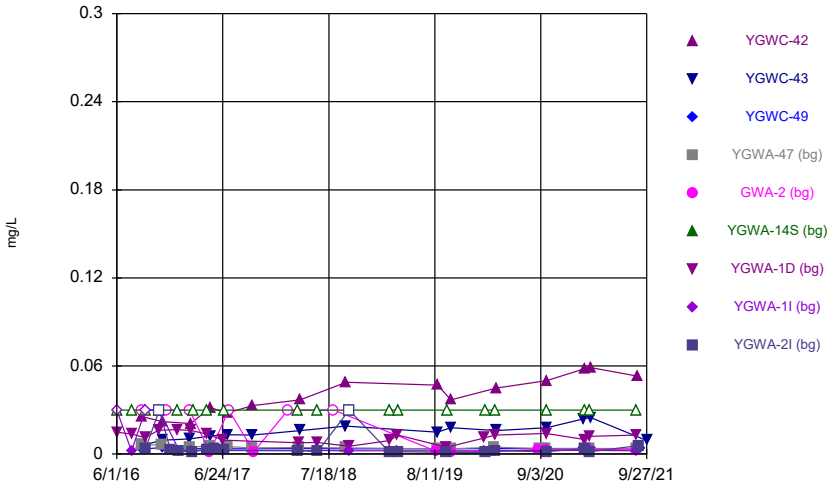
Time Series



Constituent: Lithium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

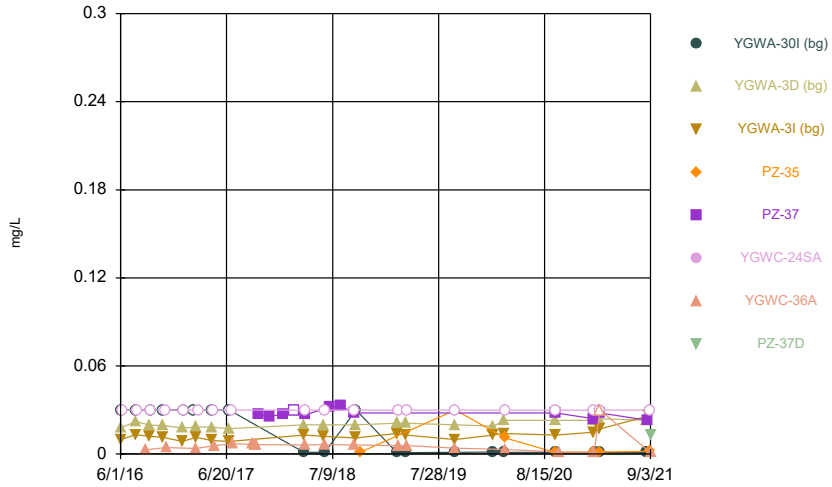
Time Series



Constituent: Lithium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

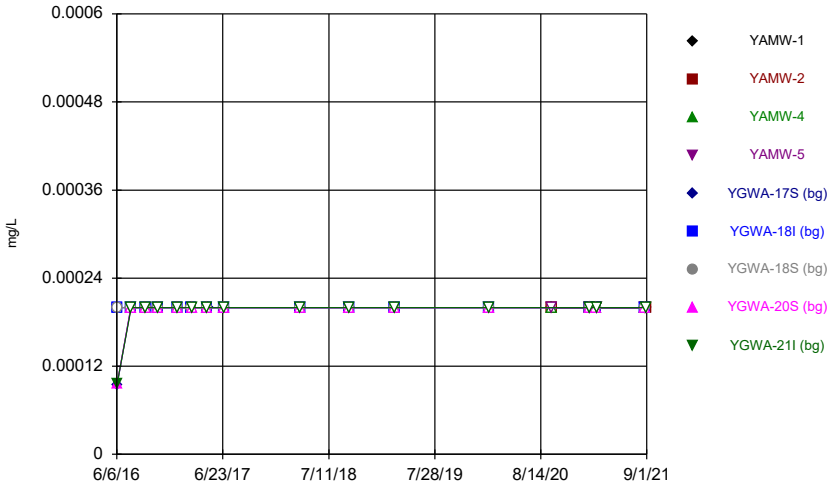
Time Series



Constituent: Lithium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

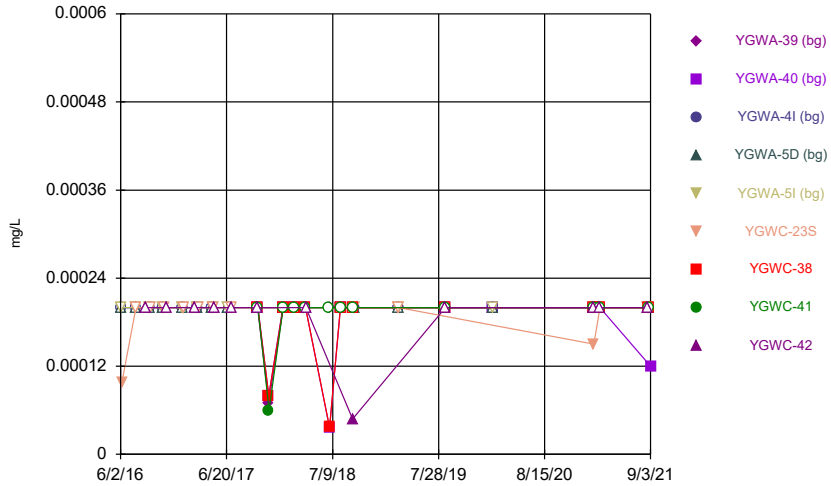
Time Series



Constituent: Mercury Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

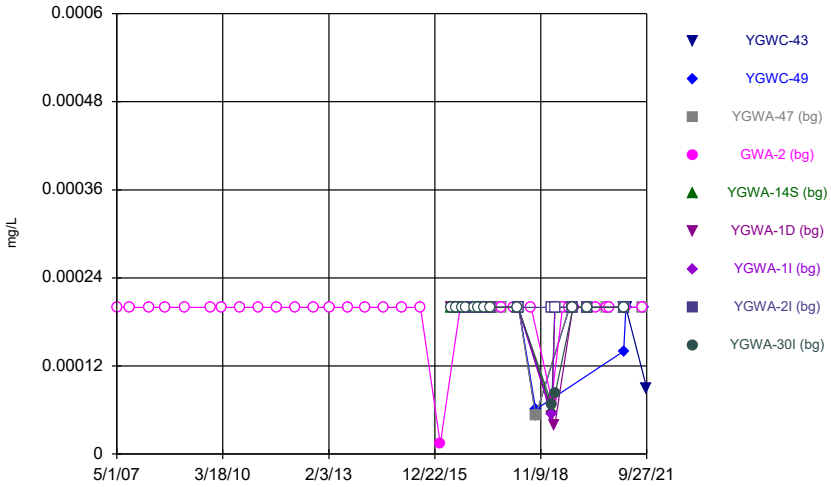
Time Series



Constituent: Mercury Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

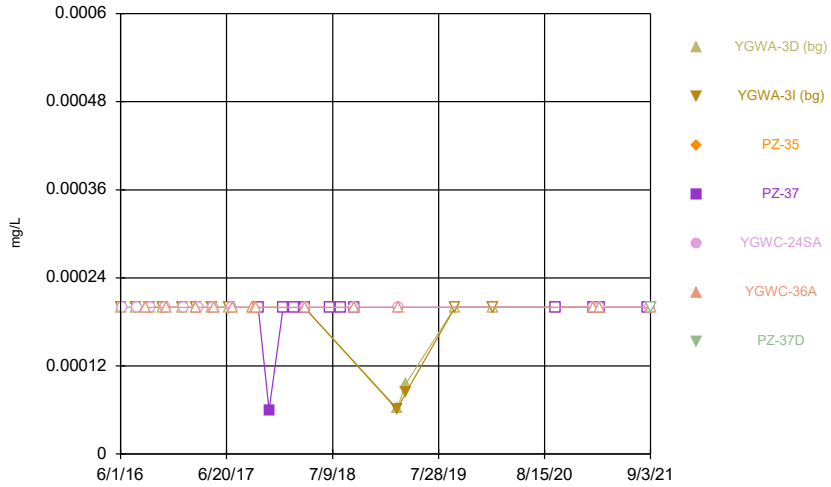
Time Series



Constituent: Mercury Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

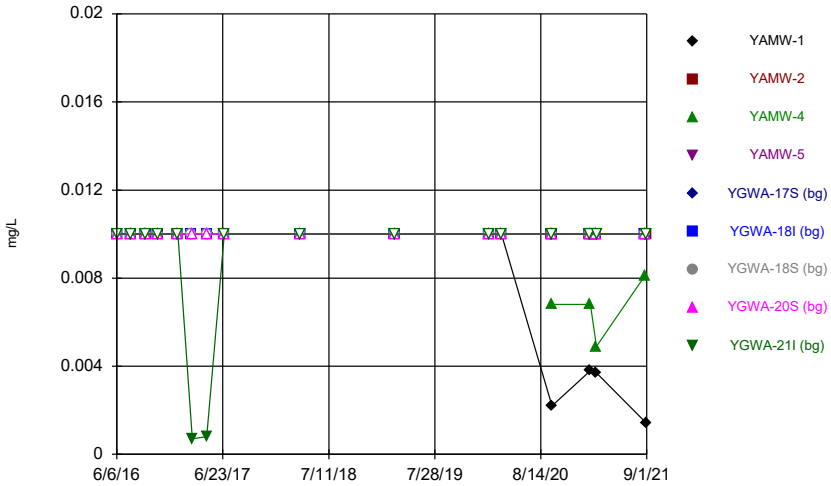
Time Series



Constituent: Mercury Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

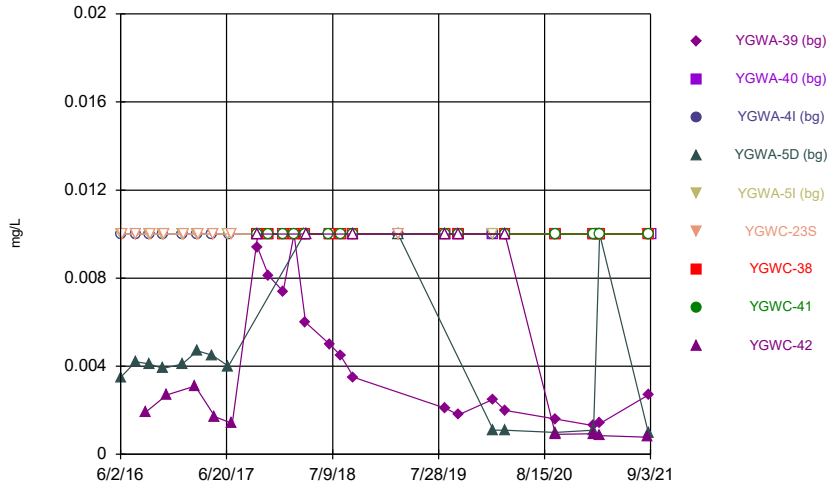
Time Series



Constituent: Molybdenum Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

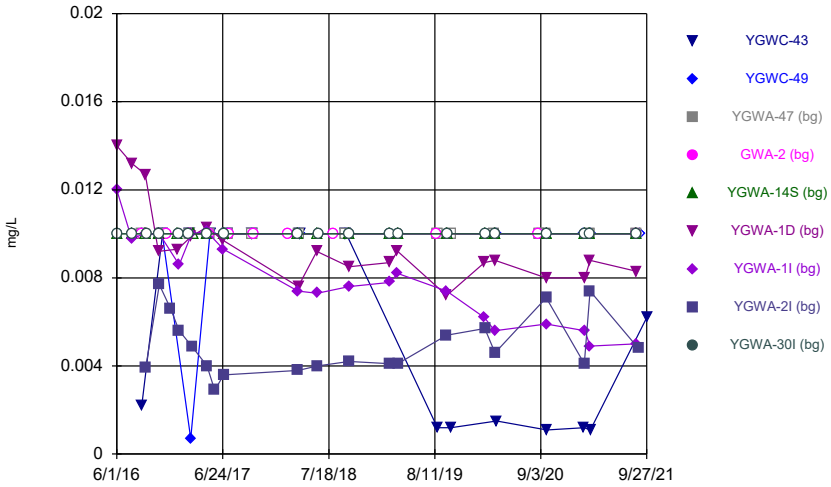
Time Series



Constituent: Molybdenum Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

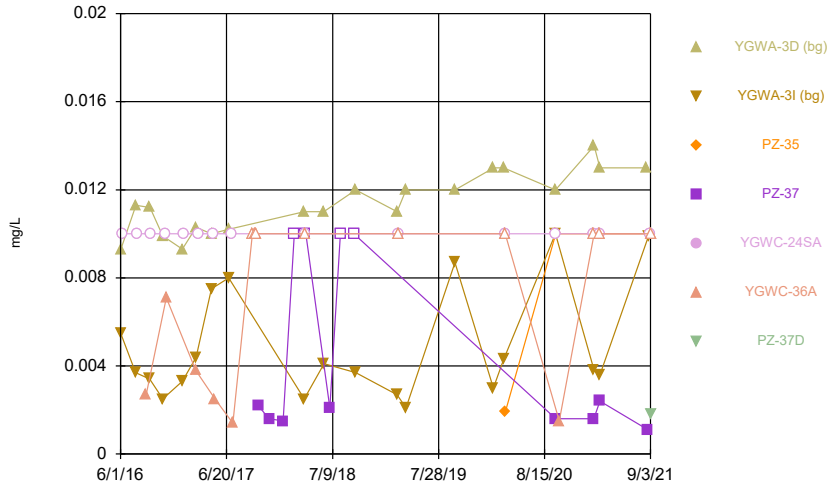
Time Series



Constituent: Molybdenum Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

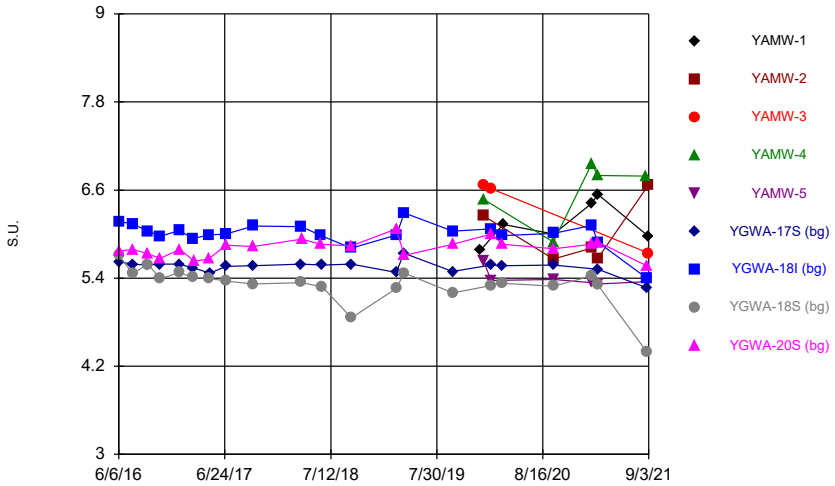
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Molybdenum Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Time Series

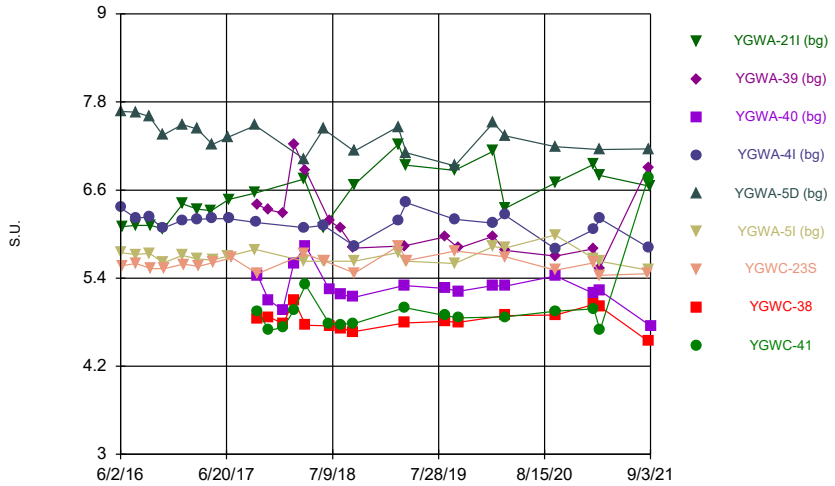


Constituent: pH Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

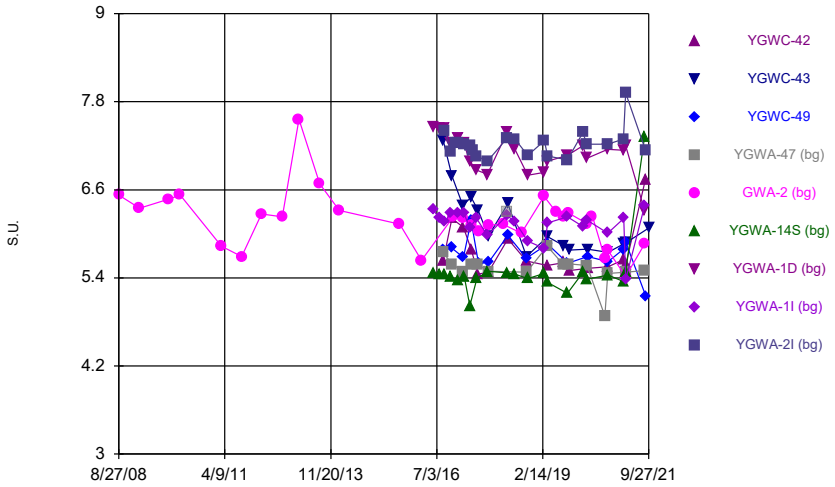


Constituent: pH Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series



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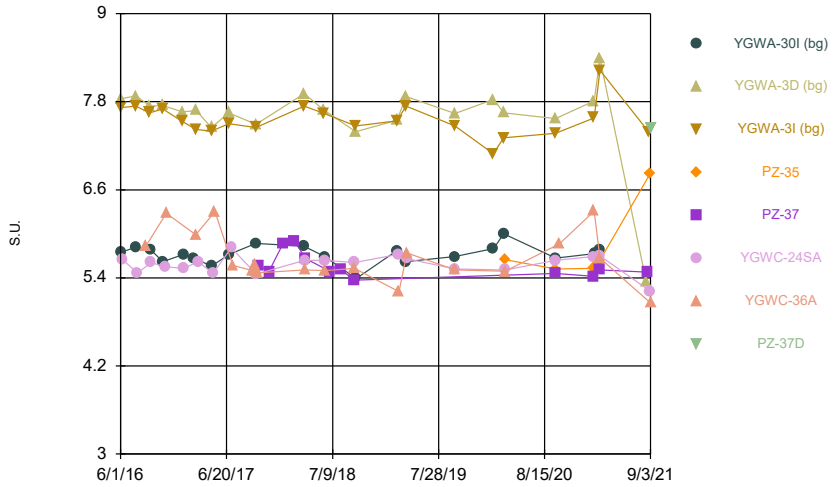
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

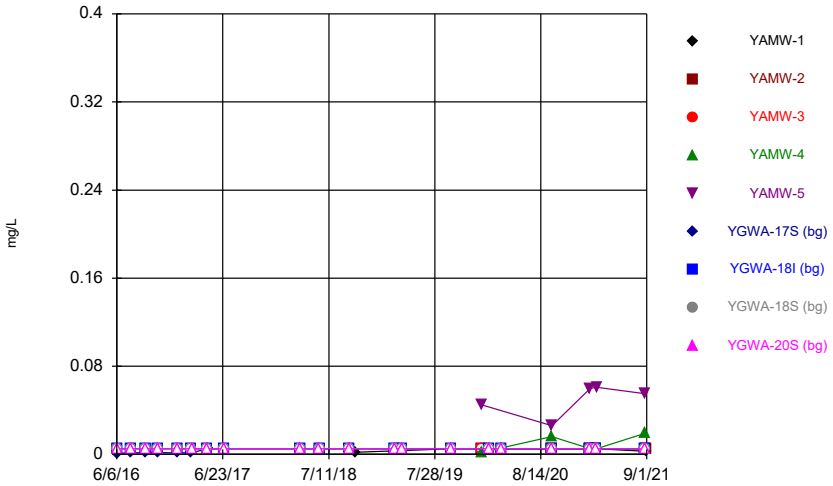


Constituent: pH Analysis Run 1/6/2022 12:01 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

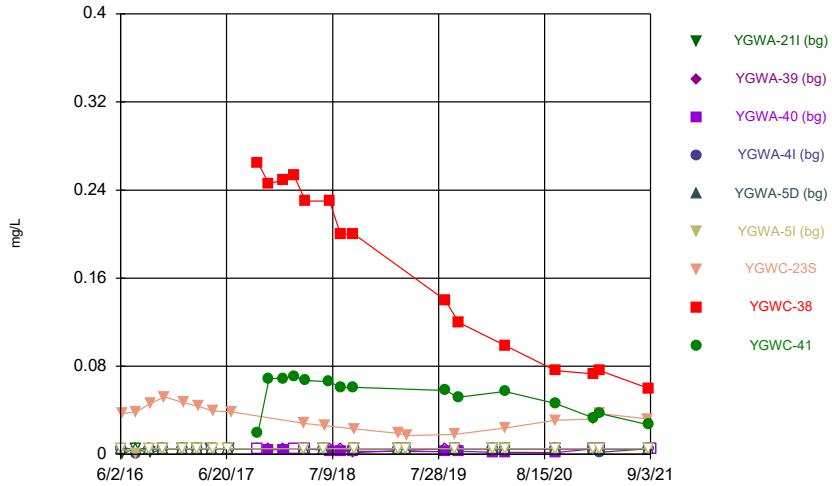
Time Series



Constituent: Selenium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

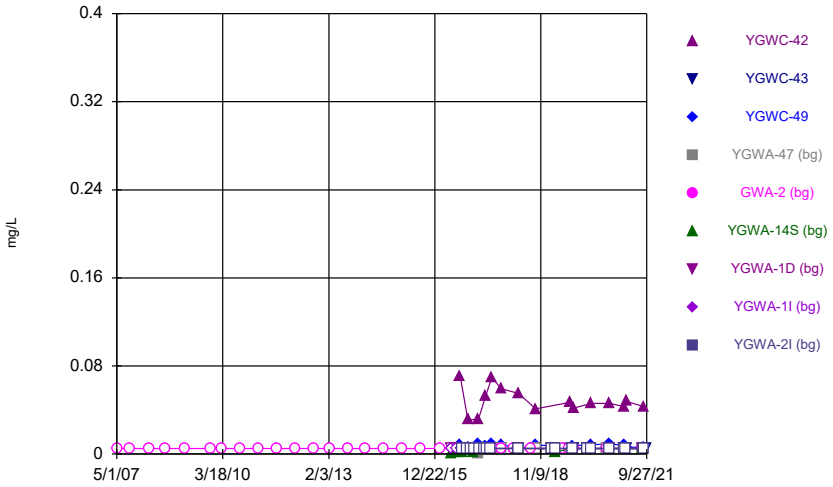
Time Series



Constituent: Selenium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

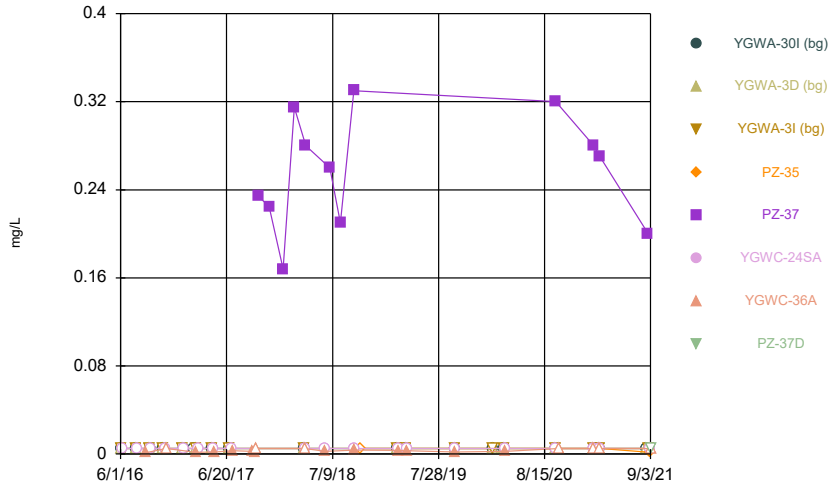
Time Series



Constituent: Selenium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

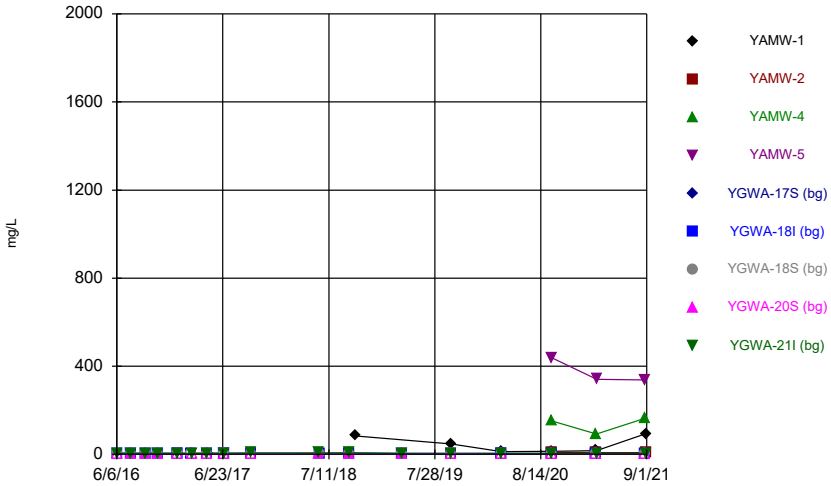
Time Series



Constituent: Selenium Analysis Run 1/6/2022 12:01 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

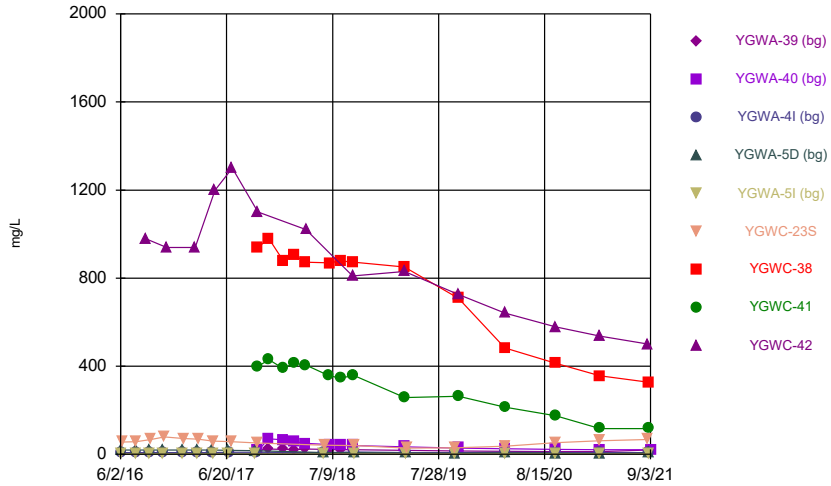
Time Series



Constituent: Sulfate Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

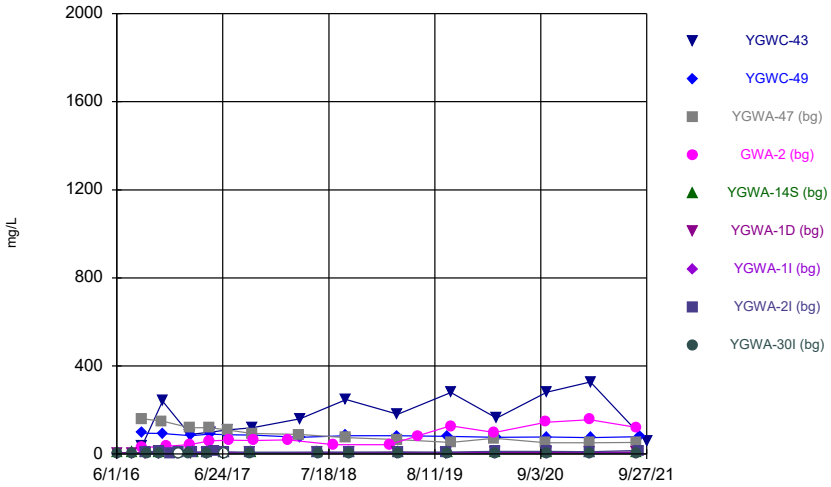
Time Series



Constituent: Sulfate Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

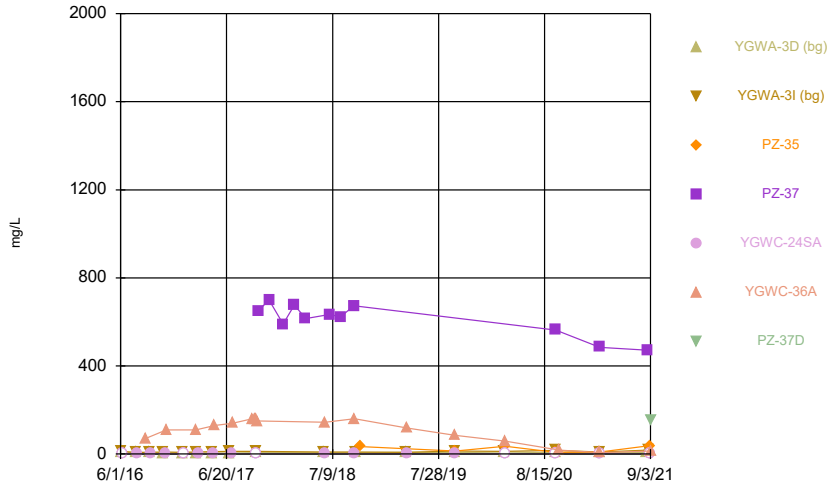
Time Series



Constituent: Sulfate Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

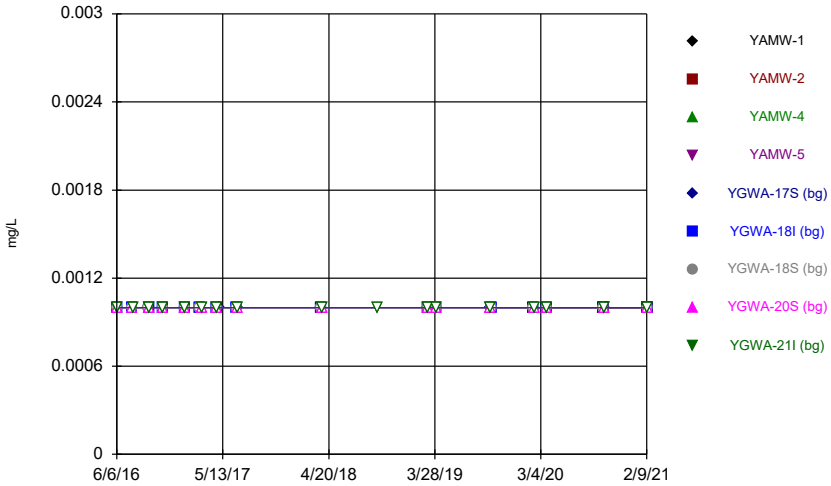
Time Series



Constituent: Sulfate Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

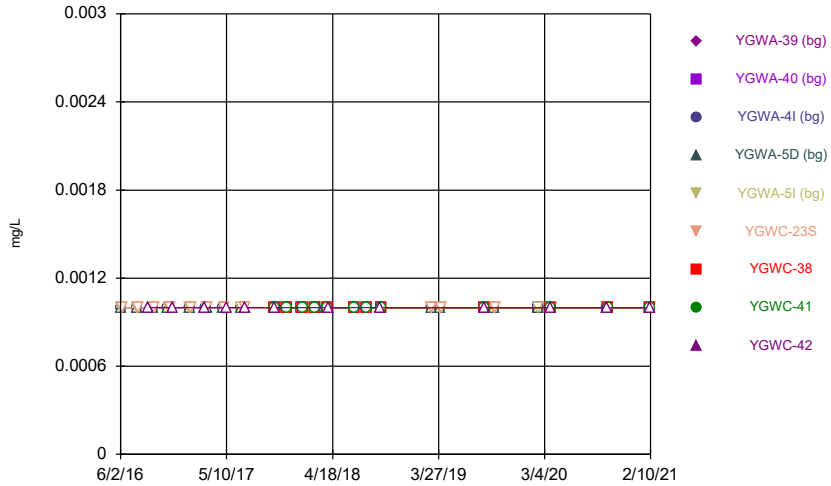
Time Series



Constituent: Thallium Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

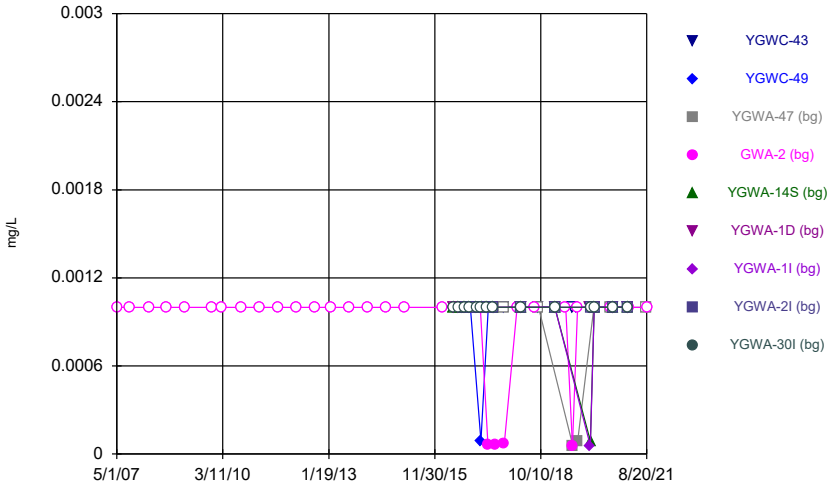
Time Series



Constituent: Thallium Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

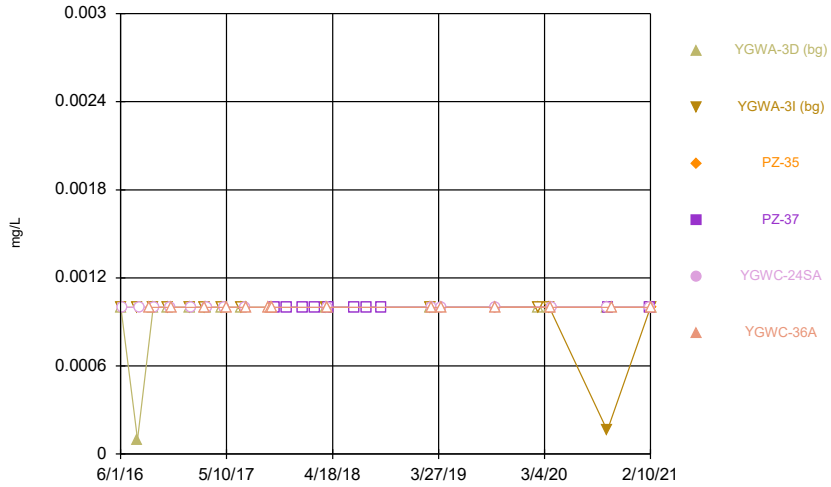
Time Series



Constituent: Thallium Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

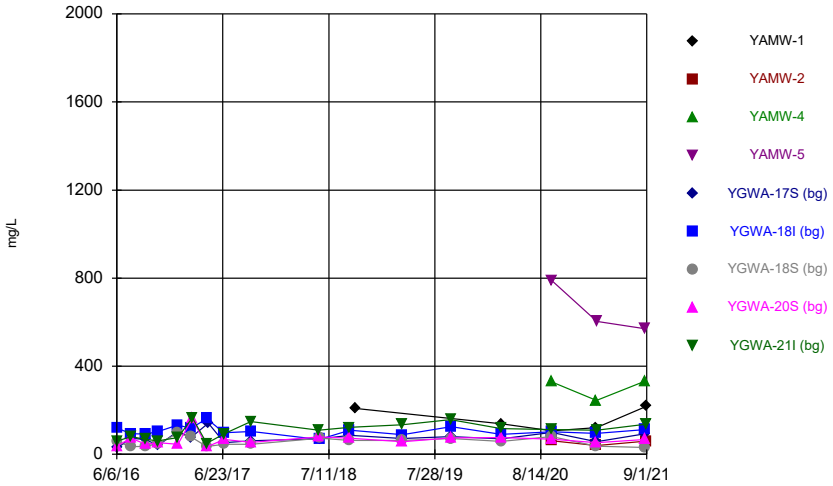
Time Series



Constituent: Thallium Analysis Run 1/6/2022 12:02 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series

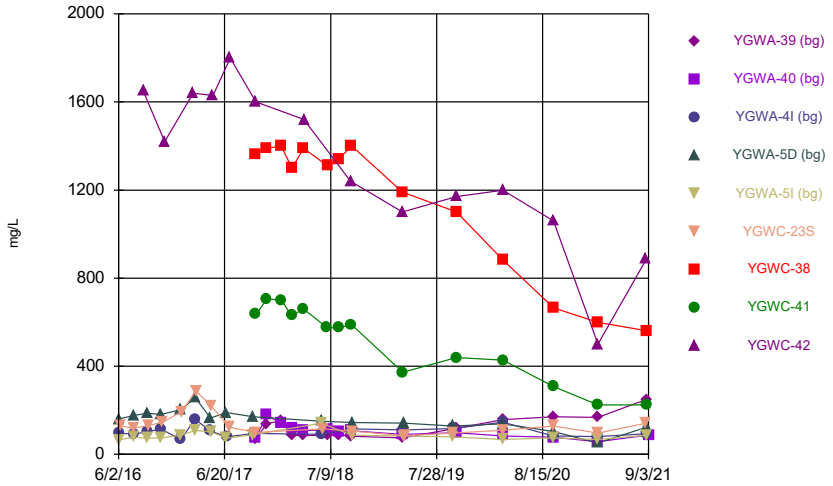


Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series



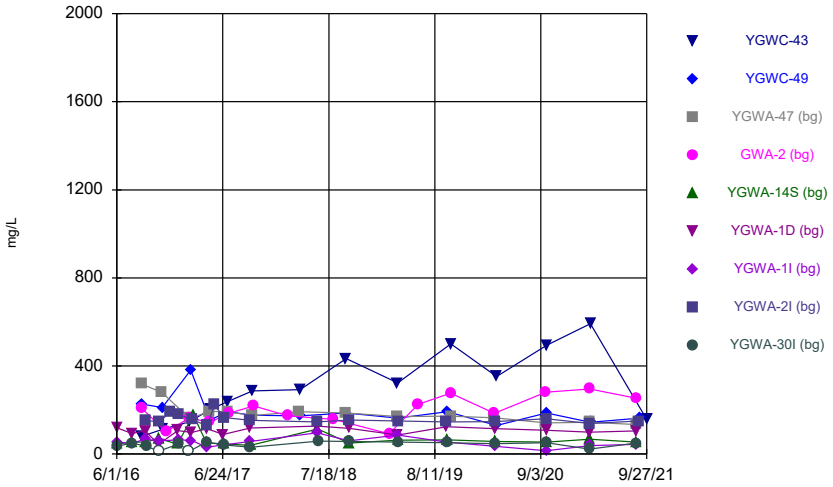
Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

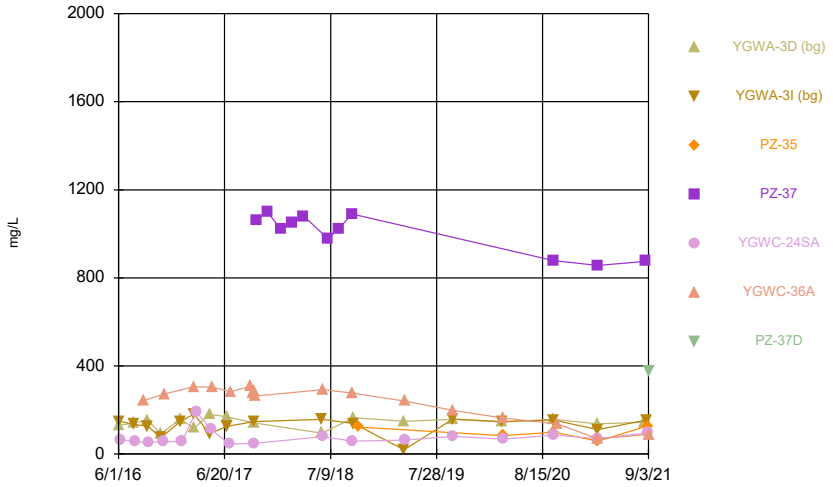


Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.003	<0.003		
6/7/2016					<0.003			<0.003	<0.003
7/27/2016					<0.003	0.0005 (J)	<0.003	<0.003	
7/28/2016									<0.003
9/16/2016					<0.003		<0.003		
9/19/2016						<0.003		<0.003	0.001 (J)
11/2/2016								<0.003	
11/3/2016					<0.003	<0.003	<0.003		<0.003
1/11/2017					<0.003	<0.003	<0.003		
1/13/2017								<0.003	<0.003
3/1/2017						<0.003	<0.003		
3/2/2017					<0.003				
3/6/2017								<0.003	0.0005 (J)
4/26/2017						<0.003	<0.003	<0.003	<0.003
5/2/2017					<0.003				
6/28/2017						<0.003	<0.003		
6/29/2017					<0.003			<0.003	<0.003
3/28/2018					<0.003	<0.003	<0.003		
3/29/2018								<0.003	<0.003
3/5/2019					<0.003		<0.003	<0.003	0.0011 (J)
3/6/2019						<0.003			
4/2/2019					<0.003				0.0011 (J)
4/3/2019						<0.003	<0.003	<0.003	
9/24/2019									0.0035
9/25/2019					<0.003			<0.003	
9/26/2019	<0.003					0.00056 (J)	<0.003		
2/11/2020					<0.003	<0.003	<0.003		
2/12/2020								<0.003	0.0015 (J)
3/24/2020					<0.003	<0.003	<0.003	<0.003	0.0017 (J)
3/25/2020	<0.003								
9/23/2020		<0.003	0.00065 (J)		<0.003	<0.003	<0.003		
9/24/2020	<0.003			0.00033 (J)				<0.003	0.0047
2/9/2021	0.00037 (J)	<0.003	0.0011 (J)	<0.003		<0.003	<0.003	0.00032 (J)	0.0013 (J)
3/3/2021	0.025	<0.003	0.00062 (J)		<0.003	<0.003	0.00067 (J)	<0.003	
3/4/2021				<0.003					0.0014 (J)
8/25/2021			<0.003						
8/26/2021				<0.003			<0.003		
8/27/2021					<0.003	<0.003		<0.003	
9/1/2021	0.0024 (J)	<0.003							<0.003

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.003	<0.003	<0.003				
6/7/2016						<0.003			
7/26/2016			0.0003 (J)	<0.003	<0.003				
7/28/2016						<0.003			
8/30/2016									<0.003
9/14/2016			<0.003	<0.003	<0.003				
9/20/2016						<0.003			
11/2/2016			<0.003	<0.003					
11/4/2016					<0.003				
11/8/2016						<0.003			
11/16/2016									<0.003
1/12/2017				<0.003	<0.003				
1/13/2017			<0.003						
1/16/2017						<0.003			
2/27/2017									<0.003
3/6/2017			<0.003						
3/7/2017				<0.003	<0.003				
3/9/2017						<0.003			
5/1/2017			<0.003	<0.003					
5/2/2017					<0.003	<0.003			
5/10/2017									<0.003
6/27/2017				<0.003	<0.003				
6/29/2017			<0.003						
7/10/2017						<0.003			
7/11/2017									<0.003
10/11/2017	0.0006 (J)								
10/12/2017		<0.003					<0.003	<0.003	<0.003
11/20/2017	<0.003	<0.003					<0.003		
11/21/2017								<0.003	
1/10/2018		<0.003							
1/11/2018	<0.003							<0.003	
1/12/2018							<0.003		
2/19/2018		<0.003						<0.003	
2/20/2018	<0.003						<0.003		
3/29/2018			<0.003	<0.003	<0.003				
3/30/2018						<0.003			
4/3/2018	<0.003	<0.003					<0.003	<0.003	
4/4/2018									<0.003
6/27/2018								<0.003	
6/28/2018	<0.003	<0.003					<0.003		
8/7/2018	<0.003	<0.003					0.0015 (J)	<0.003	
9/20/2018									<0.003
9/24/2018	<0.003	<0.003					<0.003	<0.003	
3/4/2019			<0.003	<0.003	<0.003				
3/6/2019						<0.003			
4/3/2019			<0.003	<0.003	<0.003				
4/4/2019						<0.003			
8/21/2019	<0.003	<0.003							
8/22/2019							<0.003	<0.003	<0.003
9/24/2019				<0.003	<0.003				
9/25/2019			<0.003						
9/27/2019						0.00029 (J)			

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
2/12/2020	<0.003	<0.003	<0.003	<0.003	<0.003				
3/24/2020		<0.003		<0.003	<0.003				
3/25/2020	0.0014 (J)		<0.003				0.00063 (J)	<0.003	<0.003
3/26/2020						<0.003			
9/22/2020			<0.003	<0.003	<0.003				
9/24/2020	<0.003	<0.003				0.00085 (J)			<0.003
9/25/2020							0.00061 (J)	<0.003	
2/8/2021				<0.003	<0.003				
2/9/2021			<0.003			0.00052 (J)	0.00031 (J)		
2/10/2021	<0.003	<0.003						0.0014 (J)	0.00053 (J)
3/2/2021				<0.003	<0.003				
3/3/2021			<0.003						
3/4/2021	<0.003	<0.003				<0.003	<0.003	<0.003	<0.003
8/25/2021						<0.003			<0.003
8/26/2021	<0.003		<0.003	<0.003	<0.003		<0.003	<0.003	
9/3/2021		<0.003							

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.003
7/26/2016					0.0005 (J)	0.001 (J)			
8/30/2016			0.0028 (J)						
8/31/2016	<0.003			<0.003					
9/1/2016		<0.003							
9/13/2016						0.001 (J)	<0.003		
9/14/2016								<0.003	
9/15/2016					<0.003				
9/19/2016									<0.003
11/1/2016						0.0015 (J)			<0.003
11/2/2016					<0.003				
11/4/2016							<0.003	<0.003	
11/14/2016			<0.003						
11/15/2016		<0.003							
11/16/2016	<0.003								
11/28/2016				0.0014 (J)					
12/15/2016								0.0012 (J)	
1/10/2017					<0.003				
1/11/2017						<0.003			
1/16/2017							<0.003	<0.003	<0.003
2/21/2017									<0.003
2/22/2017				<0.003					
2/24/2017	<0.003		<0.003						
2/27/2017		0.0011 (J)							
3/2/2017						0.0004 (J)	<0.003		
3/3/2017								<0.003	
3/8/2017					<0.003				
4/26/2017					<0.003				<0.003
4/27/2017						0.0004 (J)	0.0017 (J)		
4/28/2017								0.0015 (J)	
5/8/2017			0.0004 (J)	<0.003					

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Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.003							
5/10/2017	<0.003								
5/26/2017								0.0005 (J)	
6/27/2017						<0.003	<0.003		
6/28/2017								<0.003	
6/30/2017					<0.003				<0.003
7/11/2017	<0.003		0.0006 (J)						
7/13/2017		<0.003							
7/17/2017				<0.003					
10/10/2017			<0.003						
10/11/2017		<0.003							
10/12/2017	<0.003								
10/16/2017				<0.003					
2/19/2018				<0.003					
3/27/2018					<0.003		<0.003		<0.003
3/28/2018								<0.003	
3/29/2018						<0.003			
4/2/2018			<0.003						
4/4/2018	<0.003	<0.003							
8/6/2018				<0.003					
9/19/2018			<0.003						
9/20/2018	<0.003	<0.003							
2/25/2019				<0.003					
2/26/2019					<0.003				<0.003
2/27/2019						<0.003	<0.003	<0.003	
6/12/2019				<0.003					
8/19/2019				<0.003					
8/20/2019			<0.003						
8/21/2019	<0.003								
9/26/2019		<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)	<0.003
3/25/2020	0.00031 (J)	0.00053 (J)							
8/26/2020				0.00042 (J)					
8/27/2020			0.00048 (J)						
9/22/2020			<0.003	0.00044 (J)					
9/23/2020						<0.003	<0.003	<0.003	
9/24/2020		<0.003							<0.003
9/25/2020	<0.003				<0.003				
2/9/2021	<0.003	<0.003							
2/10/2021					<0.003			0.0013 (J)	
2/11/2021									<0.003
2/12/2021						<0.003	<0.003		
3/1/2021			0.00048 (J)						<0.003
3/2/2021				<0.003	<0.003				
3/3/2021						<0.003	<0.003	<0.003	
3/4/2021	<0.003	<0.003							

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/19/2021			<0.003		<0.003	<0.003	<0.003		<0.003
8/20/2021				<0.003					
8/27/2021								<0.003	
9/1/2021		<0.003							
9/27/2021	<0.003								

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Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.003					
6/2/2016	<0.003						
6/8/2016					<0.003		
7/25/2016		<0.003					
7/26/2016	0.002 (J)						
8/1/2016					<0.003		
9/2/2016						<0.003	
9/14/2016		<0.003					
9/15/2016	0.0027 (J)						
9/20/2016					0.0009 (J)		
11/1/2016	<0.003	<0.003					
11/8/2016					<0.003		
11/14/2016						0.0014 (J)	
1/11/2017	<0.003	<0.003					
1/17/2017					<0.003		
2/28/2017						0.0004 (J)	
3/1/2017		<0.003					
3/2/2017	0.0008 (J)						
3/8/2017					<0.003		
4/26/2017	<0.003	<0.003					
5/2/2017					<0.003		
5/9/2017						<0.003	
6/28/2017	<0.003	<0.003					
7/7/2017					<0.003		
7/13/2017						<0.003	
9/22/2017						<0.003	
9/29/2017						<0.003	
10/6/2017						<0.003	
10/12/2017				<0.003			
11/21/2017				<0.003			
1/11/2018				<0.003			
2/20/2018				<0.003			
3/28/2018	<0.003	<0.003					
3/30/2018					<0.003	<0.003	
4/3/2018				<0.003			
6/29/2018				<0.003			
8/6/2018				<0.003			
9/24/2018				<0.003			
2/27/2019	<0.003	<0.003					
3/5/2019					<0.003		
3/6/2019						0.0011 (J)	
4/4/2019					<0.003	0.0041	
9/26/2019			<0.003		<0.003	0.0065	
2/11/2020		<0.003					
2/12/2020	<0.003						
3/19/2020	0.00064 (J)	<0.003					
3/25/2020			<0.003			0.0011 (J)	
3/26/2020					<0.003		
9/23/2020	<0.003	<0.003			<0.003		
9/24/2020			<0.003				
9/25/2020				0.0014 (J)			
10/7/2020						<0.003	

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Constituent: Antimony (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
2/9/2021				0.00035 (J)	<0.003		
2/10/2021	<0.003	<0.003	<0.003			0.028	
3/3/2021	<0.003	<0.003			<0.003		
3/4/2021			0.00039 (J)	<0.003		0.0015 (J)	
8/19/2021	<0.003						
8/25/2021				<0.003			
8/27/2021		<0.003					
9/1/2021			<0.003		<0.003		
9/3/2021						0.0016 (J)	<0.003

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.005	<0.005		
6/7/2016					<0.005			<0.005	<0.005
7/27/2016					<0.005	<0.005	<0.005	<0.005	
7/28/2016									<0.005
9/16/2016					<0.005		<0.005		
9/19/2016						<0.005		<0.005	<0.005
11/2/2016								<0.005	
11/3/2016					<0.005	<0.005	<0.005		<0.005
1/11/2017					<0.005	<0.005	<0.005		
1/13/2017								<0.005	<0.005
3/1/2017						<0.005	<0.005		
3/2/2017					<0.005				
3/6/2017								<0.005	0.0017 (J)
4/26/2017						<0.005	<0.005	<0.005	<0.005
5/2/2017					<0.005				
6/28/2017						<0.005	<0.005		
6/29/2017					<0.005			<0.005	<0.005
3/28/2018					<0.005	<0.005	0.00061 (J)		
3/29/2018								<0.005	0.0015 (J)
6/5/2018									0.0013 (J)
6/6/2018								<0.005	
6/7/2018						0.00066 (J)			
6/11/2018					<0.005		<0.005		
9/25/2018					<0.005	<0.005	<0.005	<0.005	0.0022 (J)
10/16/2018	<0.005								
3/5/2019					<0.005		<0.005	<0.005	0.0013 (J)
3/6/2019						<0.005			
4/2/2019					<0.005				0.00096 (J)
4/3/2019						<0.005	<0.005	<0.005	
9/24/2019									0.0026 (J)
9/25/2019					<0.005			<0.005	
9/26/2019	<0.005					<0.005	<0.005		
2/11/2020					0.0022 (J)	0.0014 (J)	0.0026 (J)		
2/12/2020								<0.005	0.0025 (J)
3/24/2020					<0.005	<0.005	<0.005	<0.005	0.0013 (J)
3/25/2020	<0.005								
9/23/2020		<0.005	<0.005		<0.005	<0.005	<0.005		
9/24/2020	<0.005			0.0015 (J)				<0.005	0.0014 (J)
2/9/2021	<0.005	<0.005	0.001 (J)	0.00095 (J)		<0.005	<0.005	<0.005	0.001 (J)
3/3/2021	<0.005	<0.005	0.00079 (J)		<0.005	<0.005	<0.005	<0.005	
3/4/2021				<0.005					0.00078 (J)
8/25/2021			<0.005						
8/26/2021				<0.005			<0.005		
8/27/2021					<0.005	<0.005		<0.005	
9/1/2021	<0.005	<0.005							<0.005

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.005	0.00071 (J)	<0.005				
6/7/2016						<0.005			
7/26/2016			<0.005	0.001 (J)	<0.005				
7/28/2016						<0.005			
8/30/2016									0.0023 (J)
9/14/2016			<0.005	<0.005	<0.005				
9/20/2016						<0.005			
11/2/2016			<0.005	<0.005					
11/4/2016					<0.005				
11/8/2016						<0.005			
11/16/2016									0.0017 (J)
1/12/2017				<0.005	<0.005				
1/13/2017			<0.005						
1/16/2017						<0.005			
2/27/2017									0.002 (J)
3/6/2017			<0.005						
3/7/2017				0.0012 (J)	<0.005				
3/9/2017						<0.005			
5/1/2017			<0.005	<0.005					
5/2/2017					<0.005	<0.005			
5/10/2017									0.0022 (J)
6/27/2017				0.0019 (J)	<0.005				
6/29/2017			<0.005						
7/10/2017						<0.005			
7/11/2017									0.003 (J)
10/11/2017	0.0009 (J)								
10/12/2017		<0.005					0.0023 (J)	0.0011 (J)	0.0031 (J)
11/20/2017	<0.005	<0.005					0.0008 (J)		
11/21/2017								<0.005	
1/10/2018		<0.005							
1/11/2018	<0.005							<0.005	
1/12/2018							0.001 (J)		
2/19/2018		<0.005						<0.005	
2/20/2018	<0.005						0.00096 (J)		
3/29/2018			<0.005	0.0006 (J)	<0.005				
3/30/2018						<0.005			
4/3/2018	<0.005	<0.005					0.0015 (J)	0.00072 (J)	
4/4/2018									0.0023 (J)
6/6/2018				0.0013 (J)					
6/7/2018			0.00059 (J)		<0.005				
6/12/2018						<0.005			
6/27/2018								0.00062 (J)	
6/28/2018	<0.005	<0.005					0.0017 (J)		
8/7/2018	<0.005	<0.005					0.00072 (J)	<0.005	
9/20/2018									0.0018 (J)
9/24/2018	<0.005	<0.005					0.0017 (J)	0.001 (J)	
9/26/2018			<0.005	0.0014 (J)	<0.005				
9/27/2018						<0.005			
3/4/2019			<0.005	<0.005	<0.005				
3/6/2019						<0.005			
4/3/2019			<0.005	<0.005	<0.005				
4/4/2019						<0.005			

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	0.00058 (J)	<0.005							
8/22/2019							0.00055 (J)	0.00036 (J)	0.00089 (J)
9/24/2019				0.00043 (J)	<0.005				
9/25/2019			<0.005						
9/27/2019						<0.005			
10/9/2019	0.00063 (J)	<0.005					0.00057 (J)	0.00052 (J)	0.00078 (J)
2/12/2020	0.00058 (J)	0.0034 (J)	<0.005	0.0046 (J)	0.002 (J)				
3/24/2020		<0.005		0.00065 (J)	<0.005				
3/25/2020	0.0012 (J)		<0.005				0.00068 (J)	0.001 (J)	0.0013 (J)
3/26/2020						0.0012 (J)			
9/22/2020			<0.005	0.001 (J)	<0.005				
9/24/2020	<0.005	<0.005				<0.005			<0.005
9/25/2020							<0.005	<0.005	
2/8/2021				<0.005	<0.005				
2/9/2021			<0.005			<0.005	0.00098 (J)		
2/10/2021	<0.005	<0.005						<0.005	0.0016 (J)
3/2/2021				<0.005	<0.005				
3/3/2021			<0.005						
3/4/2021	<0.005	<0.005				<0.005	<0.005	<0.005	<0.005
8/25/2021						<0.005			0.0014 (J)
8/26/2021	<0.005		<0.005	0.0016 (J)	<0.005		0.0013 (J)	<0.005	
9/3/2021		<0.005							

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.005
7/26/2016					<0.005	0.0016 (J)			
8/30/2016			<0.005						
8/31/2016	<0.005			<0.005					
9/1/2016		<0.005							
9/13/2016						<0.005	<0.005		
9/14/2016								<0.005	
9/15/2016					<0.005				
9/19/2016									<0.005
11/1/2016						<0.005			<0.005
11/2/2016					<0.005				
11/4/2016							<0.005	0.0017 (J)	
11/14/2016			<0.005						
11/15/2016		<0.005							
11/16/2016	<0.005								
11/28/2016				<0.005					
12/15/2016								0.0023 (J)	
1/10/2017					<0.005				
1/11/2017						0.0017 (J)			
1/16/2017							<0.005	0.0018 (J)	<0.005
2/21/2017									<0.005
2/22/2017				<0.005					
2/24/2017	<0.005		<0.005						
2/27/2017		<0.005							
3/2/2017						0.0014 (J)	<0.005		
3/3/2017								0.0016 (J)	
3/8/2017					<0.005				
4/26/2017					<0.005				<0.005
4/27/2017						0.0018 (J)	<0.005		
4/28/2017								0.002 (J)	
5/8/2017			<0.005	<0.005					

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.005							
5/10/2017	<0.005								
5/26/2017								0.0005 (J)	
6/27/2017						0.0018 (J)	<0.005		
6/28/2017								0.0016 (J)	
6/30/2017					<0.005				<0.005
7/11/2017	<0.005		<0.005						
7/13/2017		<0.005							
7/17/2017				<0.005					
10/10/2017			0.0007 (J)						
10/11/2017		0.0006 (J)							
10/12/2017	<0.005								
10/16/2017				<0.005					
2/19/2018				<0.005					
3/27/2018					<0.005		<0.005		<0.005
3/28/2018								0.0013 (J)	
3/29/2018						0.0017 (J)			
4/2/2018			<0.005						
4/4/2018	<0.005	<0.005							
6/5/2018						0.0013 (J)			
6/6/2018							<0.005		
6/7/2018								0.00082 (J)	
6/8/2018					<0.005				
6/11/2018									<0.005
8/6/2018				<0.005					
9/19/2018			0.00072 (J)						
9/20/2018	0.00099 (J)	0.001 (J)							
10/1/2018					<0.005	0.0016 (J)	<0.005	0.0011 (J)	
10/2/2018									<0.005
2/25/2019				<0.005					
2/26/2019					<0.005				<0.005
2/27/2019						0.0015 (J)	<0.005	0.001 (J)	
3/28/2019						0.00072 (J)	<0.005		
3/29/2019					<0.005			0.00063 (J)	
4/1/2019									<0.005
6/12/2019				0.00038 (J)					
8/19/2019				0.00095 (J)					
8/20/2019			<0.005						
8/21/2019	<0.005								
9/24/2019						0.0014 (J)	<0.005	<0.005	
9/25/2019					<0.005				<0.005
9/26/2019		<0.005							
10/8/2019			<0.005	<0.005					
10/9/2019	0.00051 (J)								
2/10/2020						0.0026 (J)	0.0005 (J)		
2/11/2020								0.0044 (J)	
2/12/2020					<0.005				0.0032 (J)
3/17/2020			<0.005	<0.005					
3/18/2020					<0.005		<0.005		
3/19/2020						0.00095 (J)		0.00066 (J)	<0.005
3/25/2020	0.0007 (J)	0.00086 (J)							
8/26/2020				<0.005					

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/27/2020			<0.005						
9/22/2020			<0.005	<0.005					
9/23/2020						0.0011 (J)	<0.005	0.001 (J)	
9/24/2020		<0.005							<0.005
9/25/2020	<0.005				<0.005				
2/9/2021	<0.005	<0.005							
2/10/2021					<0.005			<0.005	
2/11/2021									<0.005
2/12/2021						<0.005	<0.005		
3/1/2021			<0.005						<0.005
3/2/2021				<0.005	<0.005				
3/3/2021						<0.005	<0.005	0.00098 (J)	
3/4/2021	<0.005	<0.005							
8/19/2021			<0.005		<0.005	<0.005	<0.005		<0.005
8/20/2021				<0.005					
8/27/2021								<0.005	
9/1/2021		<0.005							
9/27/2021	<0.005								

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.005					
6/2/2016	<0.005						
6/8/2016					<0.005		
7/25/2016		<0.005					
7/26/2016	<0.005						
8/1/2016					<0.005		
9/2/2016						<0.005	
9/14/2016		<0.005					
9/15/2016	<0.005						
9/20/2016					<0.005		
11/1/2016	<0.005	<0.005					
11/8/2016					<0.005		
11/14/2016						<0.005	
1/11/2017	<0.005	<0.005					
1/17/2017					<0.005		
2/28/2017						0.0006 (J)	
3/1/2017		0.0004 (J)					
3/2/2017	<0.005						
3/8/2017					<0.005		
4/26/2017	<0.005	<0.005					
5/2/2017					<0.005		
5/9/2017						0.0006 (J)	
6/28/2017	0.0007 (J)	0.0011 (J)					
7/7/2017					<0.005		
7/13/2017						<0.005	
9/22/2017						<0.005	
9/29/2017						<0.005	
10/6/2017						<0.005	
10/12/2017				0.0014 (J)			
11/21/2017				0.0008 (J)			
1/11/2018				0.0006 (J)			
2/20/2018				<0.005			
3/28/2018	<0.005	<0.005					
3/30/2018					<0.005	<0.005	
4/3/2018				0.0012 (J)			
6/7/2018	<0.005						
6/8/2018		<0.005					
6/12/2018					<0.005		
6/13/2018						0.00066 (J)	
6/29/2018				0.0011 (J)			
8/6/2018				<0.005			
9/24/2018				0.00094 (J)			
9/26/2018					<0.005	<0.005	
10/1/2018	<0.005	<0.005					
10/16/2018			0.00069 (J)				
2/27/2019	<0.005	<0.005					
3/5/2019					<0.005		
3/6/2019						<0.005	
4/1/2019	<0.005	<0.005					
4/4/2019					<0.005	<0.005	
9/25/2019	<0.005	<0.005					
9/26/2019			<0.005		<0.005	<0.005	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
2/11/2020		0.0041 (J)					
2/12/2020	0.0038 (J)						
3/19/2020	<0.005	<0.005					
3/25/2020			<0.005			<0.005	
3/26/2020					0.0015 (J)		
9/23/2020	<0.005	<0.005			<0.005		
9/24/2020			<0.005				
9/25/2020				<0.005			
10/7/2020						<0.005	
2/9/2021				0.0015 (J)	<0.005		
2/10/2021	0.00094 (J)	0.00078 (J)	0.00096 (J)			0.00088 (J)	
3/3/2021	<0.005	<0.005			<0.005		
3/4/2021			<0.005	<0.005		<0.005	
8/19/2021	<0.005						
8/25/2021				0.0014 (J)			
8/27/2021		<0.005					
9/1/2021			<0.005		<0.005		
9/3/2021						<0.005	<0.005

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						0.028	0.019		
6/7/2016					0.012			0.014	0.0058
7/27/2016					0.0126	0.0294	0.0167	0.0141	
7/28/2016									0.0068 (J)
9/16/2016					0.0127		0.0168		
9/19/2016						0.0247		0.0155	0.0071 (J)
11/2/2016								0.0157	
11/3/2016					0.0128	0.0248	0.0159		0.0092 (J)
1/11/2017					0.0142	0.0266	0.0162		
1/13/2017								0.0158	0.0105
3/1/2017						0.0275	0.0195		
3/2/2017					0.0155				
3/6/2017								0.0163	0.0105
4/26/2017						0.024	0.0182	0.0177	0.011
5/2/2017					0.0138				
6/28/2017						0.0237	0.018		
6/29/2017					0.0128			0.017	0.0109
3/28/2018					0.014	0.024	0.021		
3/29/2018								0.014	<0.01
6/5/2018									0.011
6/6/2018								0.015	
6/7/2018						0.023			
6/11/2018					0.013		0.019		
9/25/2018					0.014	0.023	0.019	0.015	0.011
10/16/2018	0.048								
3/5/2019					0.015		0.02	0.016	0.011
3/6/2019						0.024			
4/2/2019					0.016				0.011
4/3/2019						0.025	0.017	0.018	
9/24/2019									0.011
9/25/2019					0.015			0.014	
9/26/2019	0.047					0.021	0.017		
2/11/2020					0.015	0.022	0.019		
2/12/2020								0.014	0.011
3/24/2020					0.015	0.021	0.017	0.015	0.011
3/25/2020	0.04								
9/23/2020		0.0092 (J)	0.0063 (J)		0.015	0.021	0.016		
9/24/2020	0.028			0.057				0.015	0.01
2/9/2021	0.039	0.0085 (J)	0.02	0.042		0.023	0.017	0.015	0.011
3/3/2021	0.035	0.0082	0.021		0.017	0.023	0.017	0.015	
3/4/2021				0.039					0.011
8/25/2021			0.0037 (J)						
8/26/2021				0.036			0.015		
8/27/2021					0.016	0.02		0.013	
9/1/2021	0.075	0.0072							0.0099

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			0.013	0.0084	0.019				
6/7/2016						0.045			
7/26/2016			0.0158	0.01	0.0179				
7/28/2016						0.0511			
8/30/2016									0.0455
9/14/2016			0.0143	0.0085 (J)	0.0181				
9/20/2016						0.0561			
11/2/2016			0.0148	0.0091 (J)					
11/4/2016					0.0165				
11/8/2016						0.054			
11/16/2016									0.0541
1/12/2017				0.0089 (J)	0.0199				
1/13/2017			0.0146						
1/16/2017						0.0528			
2/27/2017									0.0573
3/6/2017			0.0141						
3/7/2017				0.009 (J)	0.0196				
3/9/2017						0.0469			
5/1/2017			0.0149	0.0083 (J)					
5/2/2017					0.0202	0.0427			
5/10/2017									0.0517
6/27/2017				0.0074 (J)	0.0184				
6/29/2017			0.0154						
7/10/2017						0.0395			
7/11/2017									0.0451
10/11/2017	0.0092 (J)								
10/12/2017		0.0328					0.0269	0.0394	0.0429
11/20/2017	0.0081 (J)	0.0671					0.0255		
11/21/2017								0.032	
1/10/2018		0.0656							
1/11/2018	0.0077 (J)							0.03	
1/12/2018							0.0236		
2/19/2018		0.0598						0.0308	
2/20/2018	<0.01						0.0255		
3/29/2018			0.014	<0.01	0.021				
3/30/2018						0.03			
4/3/2018	<0.01	0.045					0.023	0.03	
4/4/2018									0.041
6/6/2018				0.008 (J)					
6/7/2018			0.014		0.019				
6/12/2018						0.024			
6/27/2018								0.028	
6/28/2018	0.0078 (J)	0.047					0.024		
8/7/2018	0.0078 (J)	0.048					0.023	0.027	
9/20/2018									0.038
9/24/2018	0.0071 (J)	0.042					0.021	0.026	
9/26/2018			0.02	0.0075 (J)	0.019				
9/27/2018						0.022			
3/4/2019			0.016	0.0077 (J)	0.019				
3/6/2019						0.019			
4/3/2019			0.017	0.0087 (J)	0.023				
4/4/2019						0.019			

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	0.015	0.035							
8/22/2019							0.019	0.021	0.031
9/24/2019				0.0075 (J)	0.019				
9/25/2019			0.015						
9/27/2019						0.018			
10/9/2019	0.013	0.036					0.019	0.021	0.027
2/12/2020	0.011	0.035	0.012	0.0079 (J)	0.021				
3/24/2020		0.033		0.0076 (J)	0.021				
3/25/2020	0.014		0.016				0.018	0.021	0.03
3/26/2020						0.027			
9/22/2020			0.013	0.0076 (J)	0.019				
9/24/2020	0.016	0.028				0.035			0.026
9/25/2020							0.015	0.016	
2/8/2021				0.0079 (J)	0.02				
2/9/2021			0.013			0.042	0.016		
2/10/2021	0.027	0.032						0.017	0.031
3/2/2021				0.014	0.019				
3/3/2021			0.014						
3/4/2021	0.028	0.032				0.043	0.016	0.017	0.03
8/25/2021						0.049			0.027
8/26/2021	0.038		0.012	0.0092	0.019		0.016	0.018	
9/3/2021		0.035							

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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					0.0081				0.0064
7/25/2016							0.0091 (J)		0.0071 (J)
7/26/2016					0.0082 (J)	0.006 (J)			
8/30/2016			0.0413						
8/31/2016	0.0065 (J)			0.0542					
9/1/2016		0.077							
9/13/2016						0.0084 (J)	0.008 (J)		
9/14/2016								0.0037 (J)	
9/15/2016					0.0087 (J)				
9/19/2016									0.0069 (J)
11/1/2016						0.0062 (J)			0.007 (J)
11/2/2016					0.0082 (J)				
11/4/2016							0.0067 (J)	0.0059 (J)	
11/14/2016			0.0383						
11/15/2016		0.0772							
11/16/2016	0.0092 (J)								
11/28/2016				0.0529					
12/15/2016								0.0056 (J)	
1/10/2017					0.0086 (J)				
1/11/2017						0.0069 (J)			
1/16/2017							0.0096 (J)	0.0049 (J)	0.0071 (J)
2/21/2017									0.0077 (J)
2/22/2017				0.0607					
2/24/2017	0.0144		0.0351						
2/27/2017		0.0888							
3/2/2017						0.0071 (J)	0.0112		
3/3/2017								0.0046 (J)	
3/8/2017					0.0088 (J)				
4/26/2017					0.0085 (J)				0.0074 (J)
4/27/2017						0.0064 (J)	0.0106		
4/28/2017								0.0039 (J)	
5/8/2017			0.0251	0.065					

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		0.0792							
5/10/2017	0.0173								
5/26/2017								0.0034 (J)	
6/27/2017						0.0054 (J)	0.0092 (J)		
6/28/2017								0.003 (J)	
6/30/2017					0.0081 (J)				0.0076 (J)
7/11/2017	0.0183		0.0233						
7/13/2017		0.0839							
7/17/2017				0.06					
10/10/2017			0.0207						
10/11/2017		0.078							
10/12/2017	0.0205								
10/16/2017				0.0542					
2/19/2018				0.0533					
3/27/2018					<0.01		<0.01		<0.01
3/28/2018								<0.01	
3/29/2018						<0.01			
4/2/2018			0.022						
4/4/2018	0.024	0.074							
6/5/2018						0.0069 (J)			
6/6/2018							0.0082 (J)		
6/7/2018								0.0037 (J)	
6/8/2018					0.007 (J)				
6/11/2018									0.007 (J)
8/6/2018				0.044					
9/19/2018			0.023						
9/20/2018	0.035	0.074							
10/1/2018					0.007 (J)	0.0062 (J)	0.0084 (J)	0.0038 (J)	
10/2/2018									0.0069 (J)
2/25/2019				0.045					
2/26/2019					0.0067 (J)				0.007 (J)
2/27/2019						0.0074 (J)	0.008 (J)	0.0035 (J)	
3/28/2019						0.0082 (J)	0.0082 (J)		
3/29/2019					0.0066 (J)			0.0039 (J)	
4/1/2019									0.0072 (J)
6/12/2019				0.063					
8/19/2019				0.065					
8/20/2019			0.024						
8/21/2019	0.03								
9/24/2019						0.0072 (J)	0.0086 (J)	0.0038 (J)	
9/25/2019					0.0071 (J)				0.0066 (J)
9/26/2019		0.065							
10/8/2019			0.025	0.058					
10/9/2019	0.04								
2/10/2020						0.0066 (J)	0.0091 (J)		
2/11/2020								0.0036 (J)	
2/12/2020					0.007 (J)				0.0073 (J)
3/17/2020			0.035	0.047					
3/18/2020					0.0076 (J)		0.0084 (J)		
3/19/2020						0.0076 (J)		0.0036 (J)	0.0074 (J)
3/25/2020	0.033	0.071							
8/26/2020				0.044					

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/27/2020			0.027						
9/22/2020			0.026	0.045					
9/23/2020						0.0068 (J)	0.0079 (J)	0.0039 (J)	
9/24/2020		0.066							0.0062 (J)
9/25/2020	0.046				0.0073 (J)				
2/9/2021	0.041	0.071							
2/10/2021					0.0078 (J)			0.0032 (J)	
2/11/2021									0.0077 (J)
2/12/2021						0.0057 (J)	0.009 (J)		
3/1/2021			0.029						0.007
3/2/2021				0.039	0.0076				
3/3/2021						0.0068	0.0094	0.0041 (J)	
3/4/2021	0.039	0.069							
8/19/2021			0.029		0.0077	0.0065	0.0079		0.0071
8/20/2021				0.036					
8/27/2021								0.003 (J)	
9/1/2021		0.066							
9/27/2021	0.0097								

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		0.0038					
6/2/2016	0.01						
6/8/2016					0.02		
7/25/2016		0.0031 (J)					
7/26/2016	0.0088 (J)						
8/1/2016					0.02		
9/2/2016						0.0409	
9/14/2016		0.0027 (J)					
9/15/2016	0.009 (J)						
9/20/2016					0.0203		
11/1/2016	0.0079 (J)	0.0027 (J)					
11/8/2016					0.0191		
11/14/2016						0.0182	
1/11/2017	0.0075 (J)	0.0036 (J)					
1/17/2017					0.0192		
2/28/2017						0.023	
3/1/2017		0.0036 (J)					
3/2/2017	0.009 (J)						
3/8/2017					0.0189		
4/26/2017	0.0078 (J)	0.0038 (J)					
5/2/2017					0.019		
5/9/2017						0.0349	
6/28/2017	0.0071 (J)	0.004 (J)					
7/7/2017					0.019		
7/13/2017						0.0484	
9/22/2017						0.0491	
9/29/2017						0.0452	
10/6/2017						0.0508	
10/12/2017				0.064			
11/21/2017				0.0579			
1/11/2018				0.0549			
2/20/2018				0.0593			
3/28/2018	<0.01	<0.01					
3/30/2018					0.02	0.043	
4/3/2018				0.051			
6/7/2018	0.0068 (J)						
6/8/2018		0.0034 (J)					
6/12/2018					0.018		
6/13/2018						0.046	
6/29/2018				0.054			
8/6/2018				0.048			
9/24/2018				0.047			
9/26/2018					0.019	0.048	
10/1/2018	0.0065 (J)	0.0034 (J)					
10/16/2018			0.063				
2/27/2019	0.0059 (J)	0.0034 (J)					
3/5/2019					0.019		
3/6/2019						0.041	
4/1/2019	0.0064 (J)	0.003 (J)					
4/4/2019					0.02	0.042	
9/25/2019	0.0059 (J)	0.005 (J)					
9/26/2019			0.039		0.017	0.025	

Time Series

Constituent: Barium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
2/11/2020		0.0031 (J)					
2/12/2020	0.0062 (J)						
3/19/2020	0.0072 (J)	0.0029 (J)					
3/25/2020			0.039			0.025	
3/26/2020					0.019		
9/23/2020	0.0051 (J)	0.0039 (J)			0.026		
9/24/2020			0.034				
9/25/2020				0.034			
10/7/2020						0.04	
2/9/2021				0.036	0.031		
2/10/2021	0.0059 (J)	0.0029 (J)	0.032			0.035	
3/3/2021	0.0064	0.0031 (J)			0.025		
3/4/2021			0.033	0.036		0.028	
8/19/2021	0.0052						
8/25/2021				0.035			
8/27/2021		0.0039 (J)					
9/1/2021			0.067		0.025		
9/3/2021						0.038	0.015

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.0005	<0.0005		
6/7/2016					<0.0005			<0.0005	<0.0005
7/27/2016					<0.0005	<0.0005	<0.0005	<0.0005	
7/28/2016									<0.0005
9/16/2016					<0.0005		<0.0005		
9/19/2016						<0.0005		<0.0005	<0.0005
11/2/2016								<0.0005	
11/3/2016					<0.0005	<0.0005	<0.0005		<0.0005
1/11/2017					<0.0005	<0.0005	<0.0005		
1/13/2017								<0.0005	<0.0005
3/1/2017						<0.0005	<0.0005		
3/2/2017					8E-05 (J)				
3/6/2017								<0.0005	<0.0005
4/26/2017						<0.0005	<0.0005	<0.0005	<0.0005
5/2/2017					<0.0005				
6/28/2017						<0.0005	<0.0005		
6/29/2017					<0.0005			<0.0005	<0.0005
3/28/2018					<0.0005	<0.0005	<0.0005		
3/29/2018								<0.0005	<0.0005
6/5/2018									<0.0005
6/6/2018								8E-05 (J)	
6/7/2018						<0.0005			
6/11/2018					9E-05 (J)		5.7E-05 (J)		
9/25/2018					8.9E-05 (J)	<0.0005	8.2E-05 (J)	6.1E-05 (J)	<0.0005
10/16/2018	<0.0005								
3/5/2019					9.1E-05 (J)		7.9E-05 (J)	0.00011 (J)	<0.0005
3/6/2019						<0.0005			
4/2/2019					9E-05 (J)				<0.0005
4/3/2019						<0.0005	7.5E-05 (J)	6.4E-05 (J)	
9/24/2019									<0.0005
9/25/2019					8.1E-05 (J)			<0.0005	
9/26/2019	<0.0005					<0.0005	8.4E-05 (J)		
1/15/2020				0.00017 (J)					
2/11/2020					7.8E-05 (J)	<0.0005	7.6E-05 (J)		
2/12/2020								7.8E-05 (J)	<0.0005
3/24/2020					8E-05 (J)	<0.0005	8.9E-05 (J)	7.6E-05 (J)	<0.0005
3/25/2020	0.00037 (J)								
9/23/2020		<0.0005	<0.0005		8.1E-05 (J)	<0.0005	8.8E-05 (J)		
9/24/2020	5.8E-05 (J)			8.6E-05 (J)				8.3E-05 (J)	<0.0005
2/9/2021	<0.0005	5.1E-05 (J)	<0.0005	0.00015 (J)		<0.0005	9.8E-05 (J)	6.8E-05 (J)	<0.0005
3/3/2021	<0.0005	<0.0005	<0.0005		9.9E-05 (J)	<0.0005	0.00011 (J)	6.8E-05 (J)	
3/4/2021				0.00013 (J)					<0.0005
8/25/2021			<0.0005						
8/26/2021				0.00012 (J)			9.3E-05 (J)		
8/27/2021					0.0001 (J)	<0.0005		5.9E-05 (J)	
9/1/2021	9.5E-05 (J)	6.5E-05 (J)							<0.0005

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.0005	<0.0005	<0.0005				
6/7/2016						<0.0005			
7/26/2016			<0.0005	<0.0005	<0.0005				
7/28/2016						<0.0005			
8/30/2016									9E-05 (J)
9/14/2016			<0.0005	<0.0005	<0.0005				
9/20/2016						0.0001 (J)			
11/2/2016			<0.0005	<0.0005					
11/4/2016					<0.0005				
11/8/2016						<0.0005			
11/16/2016									<0.0005
1/12/2017				<0.0005	<0.0005				
1/13/2017			<0.0005						
1/16/2017						0.0001 (J)			
2/27/2017									<0.0005
3/6/2017			<0.0005						
3/7/2017				<0.0005	<0.0005				
3/9/2017						0.0001 (J)			
5/1/2017			<0.0005	<0.0005					
5/2/2017					<0.0005	9E-05 (J)			
5/10/2017									9E-05 (J)
6/27/2017				<0.0005	<0.0005				
6/29/2017			<0.0005						
7/10/2017						<0.0005			
7/11/2017									0.0001 (J)
10/11/2017	<0.0005								
10/12/2017		0.0002 (J)					0.0057	0.0036	<0.0005
11/20/2017	<0.0005	0.0003 (J)					0.0053		
11/21/2017								0.0036	
1/10/2018		0.0003 (J)							
1/11/2018	<0.0005							0.0037	
1/12/2018							0.0053		
2/19/2018		<0.0005						0.0039	
2/20/2018	<0.0005						0.0053		
3/29/2018			<0.0005	<0.0005	<0.0005				
3/30/2018						<0.0005			
4/3/2018	<0.0005	<0.0005					0.0056	0.0037	
4/4/2018									<0.0005
6/6/2018				<0.0005					
6/7/2018			<0.0005		<0.0005				
6/12/2018						8.1E-05 (J)			
6/27/2018								0.0038	
6/28/2018	<0.0005	0.00029 (J)					0.0059		
8/7/2018	<0.0005	0.00024 (J)					0.0058	0.0037	
9/20/2018									<0.0005
9/24/2018	<0.0005	0.00019 (J)					0.0051	0.0032	
9/26/2018			<0.0005	<0.0005	<0.0005				
9/27/2018						9E-05 (J)			
3/4/2019			<0.0005	<0.0005	<0.0005				
3/6/2019						6.6E-05 (J)			
4/3/2019			<0.0005	<0.0005	<0.0005				
4/4/2019						7.2E-05 (J)			

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	<0.0005	0.0002 (J)							
8/22/2019							0.0049	0.0026 (J)	<0.0005
9/24/2019				<0.0005	<0.0005				
9/25/2019			<0.0005						
9/27/2019						7.7E-05 (J)			
10/9/2019	<0.0005	0.0002 (J)					0.0046	0.0026 (J)	<0.0005
2/12/2020	<0.0005	0.00018 (J)	<0.0005	<0.0005	<0.0005				
3/24/2020		0.00022 (J)		<0.0005	<0.0005				
3/25/2020	<0.0005		<0.0005				0.0038	0.0026 (J)	<0.0005
3/26/2020						9E-05 (J)			
9/22/2020			<0.0005	<0.0005	<0.0005				
9/24/2020	<0.0005	0.0002 (J)				0.00015 (J)			6.7E-05 (J)
9/25/2020							0.0033	0.002 (J)	
2/8/2021				<0.0005	<0.0005				
2/9/2021			<0.0005			0.00015 (J)	0.0029 (J)		
2/10/2021	5.1E-05 (J)	0.00021 (J)						0.0015 (J)	5.7E-05 (J)
3/2/2021				<0.0005	<0.0005				
3/3/2021			<0.0005						
3/4/2021	<0.0005	0.00021 (J)				0.00013 (J)	0.0029	0.0015	<0.0005
8/25/2021						0.00019 (J)			<0.0005
8/26/2021	<0.0005		<0.0005	<0.0005	<0.0005		0.0028	0.0012	
9/3/2021		0.00024 (J)							

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.0005
7/26/2016					0.0002 (J)	<0.0005			
8/30/2016			<0.0005						
8/31/2016	<0.0005			<0.0005					
9/1/2016		0.0001 (J)							
9/13/2016						<0.0005	<0.0005		
9/14/2016								<0.0005	
9/15/2016					0.0002 (J)				
9/19/2016									<0.0005
11/1/2016						<0.0005			<0.0005
11/2/2016					0.0002 (J)				
11/4/2016							<0.0005	<0.0005	
11/14/2016			<0.0005						
11/15/2016		0.0001 (J)							
11/16/2016	<0.0005								
11/28/2016				<0.0005					
12/15/2016								<0.0005	
1/10/2017					0.0002 (J)				
1/11/2017						<0.0005			
1/16/2017							<0.0005	<0.0005	<0.0005
2/21/2017									<0.0005
2/22/2017				<0.0005					
2/24/2017	<0.0005		<0.0005						
2/27/2017		0.0001 (J)							
3/2/2017						<0.0005	<0.0005		
3/3/2017								<0.0005	
3/8/2017					0.0002 (J)				
4/26/2017					0.0002 (J)				<0.0005
4/27/2017						<0.0005	<0.0005		
4/28/2017								<0.0005	
5/8/2017			7E-05 (J)	<0.0005					

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		0.0001 (J)							
5/10/2017	<0.0005								
5/26/2017								<0.0005	
6/27/2017						<0.0005	<0.0005		
6/28/2017								<0.0005	
6/30/2017					0.0002 (J)				<0.0005
7/11/2017	<0.0005		<0.0005						
7/13/2017		0.0001 (J)							
7/17/2017				<0.0005					
10/10/2017			<0.0005						
10/11/2017		0.0001 (J)							
10/12/2017	0.0001 (J)								
10/16/2017				<0.0005					
2/19/2018				<0.0005					
3/27/2018					<0.0005		<0.0005		<0.0005
3/28/2018								<0.0005	
3/29/2018						<0.0005			
4/2/2018			<0.0005						
4/4/2018	<0.0005	<0.0005							
8/6/2018				<0.0005					
9/19/2018			5.7E-05 (J)						
9/20/2018	0.00029 (J)	0.00011 (J)							
2/25/2019				<0.0005					
2/26/2019					0.00016 (J)				7.2E-05 (J)
2/27/2019						<0.0005	<0.0005	<0.0005	
3/28/2019						<0.0005	<0.0005		
3/29/2019					0.00017 (J)			<0.0005	
4/1/2019									<0.0005
6/12/2019				<0.0005					
8/19/2019				<0.0005					
8/20/2019			<0.0005						
8/21/2019	0.0003 (J)								
9/24/2019						<0.0005	<0.0005	<0.0005	
9/25/2019					0.00018 (J)				<0.0005
9/26/2019		0.00013 (J)							
10/8/2019				<0.0005					
10/9/2019	0.00034 (J)								
2/10/2020						<0.0005	<0.0005		
2/11/2020								<0.0005	
2/12/2020					0.00019 (J)				<0.0005
3/17/2020				<0.0005					
3/18/2020					0.00021 (J)		<0.0005		
3/19/2020						<0.0005		<0.0005	<0.0005
3/25/2020	0.00034 (J)	0.00013 (J)							
8/26/2020				<0.0005					
8/27/2020			4.7E-05 (J)						
9/22/2020			<0.0005	<0.0005					
9/23/2020						<0.0005	<0.0005	<0.0005	
9/24/2020		0.00013 (J)							<0.0005
9/25/2020	0.00054 (J)				0.00018 (J)				
2/9/2021	0.00053 (J)	0.00013 (J)							
2/10/2021					0.00019 (J)			<0.0005	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
2/11/2021									4.7E-05 (J)
2/12/2021						<0.0005	<0.0005		
3/1/2021			5.5E-05 (J)						<0.0005
3/2/2021				<0.0005	0.00018 (J)				
3/3/2021						<0.0005	<0.0005	<0.0005	
3/4/2021	0.00056	0.0001 (J)							
8/19/2021			<0.0005		0.00022 (J)	<0.0005	<0.0005		<0.0005
8/20/2021				<0.0005					
8/27/2021								<0.0005	
9/1/2021		0.00012 (J)							
9/27/2021	0.00015 (J)								

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.0005					
6/2/2016	<0.0005						
6/8/2016					<0.0005		
7/25/2016		<0.0005					
7/26/2016	<0.0005						
8/1/2016					0.0001 (J)		
9/2/2016						0.0003 (J)	
9/14/2016		<0.0005					
9/15/2016	<0.0005						
9/20/2016					0.0001 (J)		
11/1/2016	<0.0005	<0.0005					
11/8/2016					<0.0005		
11/14/2016						9E-05 (J)	
1/11/2017	<0.0005	<0.0005					
1/17/2017					0.0001 (J)		
2/28/2017						0.0001 (J)	
3/1/2017		<0.0005					
3/2/2017	<0.0005						
3/8/2017					0.0001 (J)		
4/26/2017	<0.0005	<0.0005					
5/2/2017					0.0001 (J)		
5/9/2017						0.0002 (J)	
6/28/2017	<0.0005	<0.0005					
7/7/2017					0.0001 (J)		
7/13/2017						0.0003 (J)	
9/22/2017						0.0003 (J)	
9/29/2017						0.0003 (J)	
10/6/2017						0.0003 (J)	
10/12/2017				0.0004 (J)			
11/21/2017				0.0004 (J)			
1/11/2018				0.0003 (J)			
2/20/2018				<0.0005			
3/28/2018	<0.0005	<0.0005					
3/30/2018					<0.0005	<0.0005	
4/3/2018				<0.0005			
6/12/2018					0.00012 (J)		
6/13/2018						0.00035 (J)	
6/29/2018				0.00033 (J)			
8/6/2018				0.0002 (J)			
8/30/2018			0.00052 (J)				
9/24/2018				0.00029 (J)			
9/26/2018					0.00014 (J)	0.00032 (J)	
10/16/2018			0.00036 (J)				
2/27/2019	<0.0005	<0.0005					
3/5/2019					0.00016 (J)		
3/6/2019						0.00029 (J)	
4/1/2019	<0.0005	<0.0005					
4/4/2019					0.00015 (J)	0.00033 (J)	
9/25/2019	<0.0005	<0.0005					
9/26/2019			<0.0005		0.00014 (J)	0.00029 (J)	
2/11/2020		<0.0005					
2/12/2020	<0.0005						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
3/19/2020	<0.0005	<0.0005					
3/25/2020			<0.0005			0.00022 (J)	
3/26/2020					0.00016 (J)		
9/23/2020	<0.0005	5.9E-05 (J)			6.1E-05 (J)		
9/24/2020			0.00033 (J)				
9/25/2020				0.00031 (J)			
10/7/2020						0.00014 (J)	
2/9/2021				0.00029 (J)	0.00013 (J)		
2/10/2021	<0.0005	<0.0005	0.00025 (J)			9.9E-05 (J)	
3/3/2021	<0.0005	<0.0005			9.9E-05 (J)		
3/4/2021			0.00025 (J)	0.00017 (J)		0.00016 (J)	
8/19/2021	<0.0005						
8/25/2021				0.00059			
8/27/2021		<0.0005					
9/1/2021			0.00045 (J)		0.00014 (J)		
9/3/2021						0.00035 (J)	<0.0005

Time Series

Constituent: Boron (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-3	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)
6/6/2016							<0.04	<0.04	
6/7/2016						<0.04			<0.04
7/27/2016						0.008 (J)	<0.04	0.0059 (J)	<0.04
9/16/2016						0.0086 (J)		0.0079 (J)	
9/19/2016							<0.04		<0.04
11/2/2016									<0.04
11/3/2016						0.0077 (J)	<0.04	0.0082 (J)	
1/11/2017						0.0092 (J)	<0.04	0.0096 (J)	
1/13/2017									<0.04
3/1/2017							<0.04	<0.04	
3/2/2017						0.0095 (J)			
3/6/2017									<0.04
4/26/2017							<0.04	0.0091 (J)	<0.04
5/2/2017						<0.04			
6/28/2017							<0.04	0.0079 (J)	
6/29/2017						0.0074 (J)			<0.04
10/4/2017						0.0077 (J)		0.009 (J)	<0.04
10/5/2017							<0.04		
6/6/2018									0.0049 (J)
6/7/2018							<0.04		
6/11/2018						0.01 (J)		0.0093 (J)	
9/25/2018						0.0096 (J)	0.0046 (J)	0.007 (J)	<0.04
10/16/2018	0.2								
4/2/2019						0.0066 (J)			
4/3/2019							<0.04	0.0053 (J)	<0.04
9/25/2019						0.0081 (J)			<0.04
9/26/2019	0.092						0.0062 (J)	0.0072 (J)	
1/15/2020		0.031 (J)			8.7				
1/16/2020			6.8	1.9					
2/11/2020			4.5		7.8				
3/24/2020						0.0092 (J)	0.0054 (J)	0.01 (J)	<0.04
3/25/2020	0.018 (J)								
9/23/2020		0.026 (J)		2.5		0.0066 (J)	0.021 (J)	0.006 (J)	
9/24/2020	0.076 (J)				8.7				0.0094 (J)
3/3/2021	0.039 (J)	0.032 (J)		0.81		0.01 (J)	<0.04	0.0094 (J)	<0.04
3/4/2021					6.1				
8/25/2021				2.8					
8/26/2021					5.9			<0.04	
8/27/2021						0.011 (J)	<0.04		<0.04
9/1/2021	0.18	0.017 (J)							

Time Series

Constituent: Boron (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
6/2/2016				<0.04	<0.04	<0.04			
6/7/2016	<0.04						0.99		
7/26/2016				0.0047 (J)	0.0052 (J)	<0.04			
7/28/2016	<0.04						1.09		
9/14/2016				<0.04	0.0071 (J)	0.01 (J)			
9/19/2016	<0.04								
9/20/2016							1.35		
11/2/2016				<0.04	<0.04				
11/3/2016	<0.04								
11/4/2016						<0.04			
11/8/2016							1.5		
1/12/2017					0.0076 (J)	<0.04			
1/13/2017	<0.04			<0.04					
1/16/2017							1.67		
3/6/2017	<0.04			<0.04					
3/7/2017					0.0089 (J)	<0.04			
3/9/2017							1.44		
4/26/2017	<0.04								
5/1/2017				<0.04	0.0061 (J)				
5/2/2017						<0.04	1.2		
6/27/2017					0.0079 (J)	<0.04			
6/29/2017	<0.04			<0.04					
7/10/2017							1.12		
10/3/2017	<0.04				0.0094 (J)	<0.04			
10/5/2017				<0.04					
10/11/2017		0.0135 (J)					1.09		
10/12/2017			0.0401					19.3	12
11/20/2017		0.0251 (J)	0.156					21.8	
11/21/2017									12.1
1/10/2018			0.15						
1/11/2018		0.0255 (J)							12.8
1/12/2018								18.7	
2/19/2018			0.146						15.2
2/20/2018		<0.04						18.6	
4/3/2018		0.033 (J)	0.12					20.9	14.5
6/5/2018	0.0092 (J)								
6/6/2018					0.0098 (J)				
6/7/2018				0.0045 (J)		<0.04			
6/12/2018							0.9		
6/27/2018									14.1
6/28/2018		0.053	0.16					22.7	
8/7/2018		0.024 (J)	0.12					19.1	11.9
9/24/2018		0.028 (J)	0.099					18.4	12.2
9/25/2018	0.0054 (J)								
9/26/2018				0.005 (J)	0.01 (J)	0.0057 (J)			
9/27/2018							0.71		
3/26/2019			0.096						
3/27/2019		0.017 (J)						16.7	
3/28/2019									7.1
4/2/2019	0.011 (J)								
4/3/2019				0.0055 (J)	0.0076 (J)	0.0044 (J)			
4/4/2019							0.6		

Time Series

Constituent: Boron (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
9/24/2019	0.018 (J)				0.01 (J)	0.0049 (J)			
9/25/2019				<0.04					
9/27/2019							0.58		
10/9/2019		0.017 (J)	0.079					13.5	8.6
3/24/2020	0.016 (J)		0.088 (J)		0.011 (J)	0.0068 (J)			
3/25/2020		0.043 (J)		0.011 (J)				9.3	7.9
3/26/2020							0.94		
9/22/2020				<0.04	0.0079 (J)	0.0053 (J)			
9/24/2020	0.013 (J)	0.037 (J)	0.087 (J)				1.1		
9/25/2020								8	6
3/2/2021					0.0068 (J)	0.011 (J)			
3/3/2021				0.0056 (J)					
3/4/2021	0.0079 (J)	0.033 (J)	0.078				1.2	6.4	4
8/25/2021							1.3		
8/26/2021		0.095		<0.04	0.009 (J)	<0.04		6.1	3.3
9/1/2021	<0.04								
9/3/2021			0.077						

Time Series

Constituent: Boron (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (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			
7/25/2016								<0.04	
7/26/2016						0.0177 (J)	0.0055 (J)		
8/30/2016	24.7			0.0166 (J)					
8/31/2016		0.169			0.0315 (J)				
9/1/2016			0.0113 (J)						
9/13/2016							<0.04	<0.04	
9/14/2016									<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
11/14/2016				0.0166 (J)					
11/15/2016			0.0074 (J)						
11/16/2016	16.4	0.406							
11/28/2016					0.0095 (J)				
12/15/2016									0.0107 (J)
1/10/2017						0.0198 (J)			
1/11/2017							0.0074 (J)		
1/16/2017								<0.04	<0.04
2/22/2017					<0.04				
2/24/2017		0.725		0.0145 (J)					
2/27/2017	17.9		<0.04						
3/2/2017							0.008 (J)	<0.04	
3/3/2017									<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
5/8/2017				0.0141 (J)	0.0084 (J)				
5/9/2017			<0.04						
5/10/2017	20.4	0.955							
5/26/2017									<0.04
6/27/2017							0.0087 (J)	0.006 (J)	
6/28/2017									<0.04
6/30/2017						0.0173 (J)			
7/11/2017	25.2	0.994		0.0131 (J)					
7/13/2017			0.0093 (J)						
7/17/2017					0.0092 (J)				
10/3/2017							0.0072 (J)	0.0071 (J)	<0.04
10/5/2017						0.0173 (J)			
10/10/2017				0.0124 (J)					
10/11/2017			<0.04						
10/12/2017	20	1.15							
10/16/2017					<0.04				
2/19/2018					<0.04				
4/2/2018				0.013 (J)					
4/4/2018	22.7	1.2	0.0041 (J)						
6/5/2018							0.0052 (J)		
6/6/2018								<0.04	
6/7/2018									<0.04

Time Series

Constituent: Boron (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/8/2018						0.013 (J)			
8/6/2018					<0.04				
9/19/2018				0.012 (J)					
9/20/2018	20.3	2.1	0.0042 (J)						
10/1/2018						0.015 (J)	0.021 (J)	0.0049 (J)	<0.04
2/25/2019					<0.04				
3/27/2019	20.3			0.013 (J)					
3/28/2019		1.8	<0.04				0.005 (J)	<0.04	
3/29/2019						0.014 (J)			0.0065 (J)
6/12/2019					<0.04				
9/24/2019							0.0064 (J)	0.0055 (J)	0.0076 (J)
9/25/2019						0.018 (J)			
9/26/2019			<0.04						
10/8/2019				0.012 (J)	<0.04				
10/9/2019	16.6	2.7							
3/17/2020				0.023 (J)	0.0051 (J)				
3/18/2020						0.02 (J)		0.0087 (J)	
3/19/2020							0.0085 (J)		0.0073 (J)
3/25/2020	15.5	2.4	0.012 (J)						
9/22/2020				0.0076 (J)	0.0079 (J)				
9/23/2020							<0.04	<0.04	<0.04
9/24/2020	15.2		0.062 (J)						
9/25/2020		3.9				0.02 (J)			
3/1/2021				0.013 (J)					
3/2/2021					<0.04	0.017 (J)			
3/3/2021							<0.04	<0.04	<0.04
3/4/2021	14.8	3.6	<0.04						
8/19/2021				0.011 (J)		0.018 (J)	<0.04	<0.04	
8/20/2021					<0.04				
8/25/2021	13.5								
8/27/2021									<0.04
9/1/2021			<0.04						
9/27/2021		0.64							

Time Series

Constituent: Boron (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016			<0.04					
6/2/2016	<0.04	<0.04						
6/8/2016						<0.04		
7/25/2016	<0.04		<0.04					
7/26/2016		0.0097 (J)						
8/1/2016						<0.04		
9/2/2016							0.133	
9/14/2016			<0.04					
9/15/2016		0.0102 (J)						
9/19/2016	<0.04							
9/20/2016						<0.04		
11/1/2016	<0.04	<0.04	<0.04					
11/8/2016						<0.04		
11/14/2016							0.287	
1/11/2017		<0.04	<0.04					
1/16/2017	<0.04							
1/17/2017						<0.04		
2/21/2017	<0.04							
2/28/2017							0.215	
3/1/2017			<0.04					
3/2/2017		0.0084 (J)						
3/8/2017						<0.04		
4/26/2017	<0.04	<0.04	<0.04					
5/2/2017						0.0099 (J)		
5/9/2017							0.233	
6/28/2017		<0.04	<0.04					
6/30/2017	<0.04							
7/7/2017						0.0076 (J)		
7/13/2017							0.262	
9/22/2017							0.238	
9/29/2017							0.235	
10/4/2017	<0.04	<0.04	<0.04					
10/5/2017						<0.04		
10/6/2017							0.256	
10/11/2017							0.245	
10/12/2017					15.4			
11/21/2017					17.2			
1/11/2018					15.8			
2/20/2018					19.5			
4/3/2018					17.5			
6/7/2018		0.004 (J)						
6/8/2018			<0.04					
6/11/2018	0.014 (J)							
6/12/2018						0.018 (J)		
6/13/2018							0.25	
6/29/2018					20.6			
8/6/2018					15.9			
8/30/2018				0.04				
9/24/2018					16.5			
9/26/2018						0.0055 (J)	0.24	
10/1/2018		<0.04	<0.04					
10/2/2018	<0.04							

Time Series

Constituent: Boron (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
10/16/2018				0.031 (J)				
4/1/2019	<0.04	<0.04	<0.04					
4/4/2019						<0.04	0.22	
9/25/2019	<0.04	0.0054 (J)	<0.04					
9/26/2019				<0.04		0.0068 (J)	0.13	
3/19/2020	0.0052 (J)	0.0073 (J)	0.0053 (J)					
3/25/2020				0.071 (J)			0.11	
3/26/2020						0.033 (J)		
9/23/2020		0.012 (J)	0.0073 (J)			<0.04		
9/24/2020	0.0075 (J)			0.017 (J)				
9/25/2020					14.1			
10/7/2020							0.018 (J)	
3/1/2021	<0.04							
3/3/2021		<0.04	<0.04			<0.04		
3/4/2021				0.012 (J)	12.4		0.0088 (J)	
8/19/2021	<0.04	<0.04						
8/25/2021					10.3			
8/27/2021			<0.04					
9/1/2021				0.044		<0.04		
9/3/2021							0.012 (J)	1.6

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.0005	<0.0005		
6/7/2016					<0.0005			<0.0005	<0.0005
7/27/2016					<0.0005	<0.0005	<0.0005	<0.0005	
7/28/2016									<0.0005
9/16/2016					<0.0005		<0.0005		
9/19/2016						<0.0005		<0.0005	<0.0005
11/2/2016								<0.0005	
11/3/2016					<0.0005	<0.0005	<0.0005		<0.0005
1/11/2017					0.0001 (J)	<0.0005	0.0001 (J)		
1/13/2017								<0.0005	<0.0005
3/1/2017						<0.0005	<0.0005		
3/2/2017					<0.0005				
3/6/2017								<0.0005	<0.0005
4/26/2017						<0.0005	<0.0005	<0.0005	<0.0005
5/2/2017					<0.0005				
6/28/2017						<0.0005	<0.0005		
6/29/2017					<0.0005			<0.0005	<0.0005
3/28/2018					<0.0005	<0.0005	<0.0005		
3/29/2018								<0.0005	<0.0005
6/5/2018									<0.0005
6/6/2018								<0.0005	
6/7/2018						<0.0005			
6/11/2018					<0.0005		<0.0005		
9/25/2018					<0.0005	<0.0005	<0.0005	<0.0005	9.6E-05 (J)
10/16/2018	0.00014 (J)								
3/5/2019					<0.0005		<0.0005	<0.0005	<0.0005
3/6/2019						<0.0005			
4/2/2019					<0.0005				<0.0005
4/3/2019						<0.0005	<0.0005	<0.0005	
9/24/2019									<0.0005
9/25/2019					<0.0005			<0.0005	
9/26/2019	<0.0005					<0.0005	<0.0005		
2/11/2020					<0.0005	<0.0005	<0.0005		
2/12/2020								<0.0005	<0.0005
3/24/2020					<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
3/25/2020	<0.0005								
9/23/2020		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005		
9/24/2020	0.00017 (J)			0.00018 (J)				<0.0005	<0.0005
2/9/2021	0.00013 (J)	<0.0005	<0.0005	0.00025 (J)		<0.0005	<0.0005	<0.0005	0.00041 (J)
3/3/2021	<0.0005	<0.0005	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	
3/4/2021				0.00018 (J)					<0.0005
8/25/2021			<0.0005						
8/26/2021				0.00021 (J)			<0.0005		
8/27/2021					<0.0005	<0.0005		<0.0005	
9/1/2021	0.00023 (J)	<0.0005							<0.0005

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.0005	<0.0005	<0.0005				
6/7/2016						<0.0005			
7/26/2016			<0.0005	<0.0005	<0.0005				
7/28/2016						<0.0005			
8/30/2016									<0.0005
9/14/2016			<0.0005	<0.0005	<0.0005				
9/20/2016						<0.0005			
11/2/2016			<0.0005	<0.0005					
11/4/2016					<0.0005				
11/8/2016						7E-05 (J)			
11/16/2016									<0.0005
1/12/2017				<0.0005	9E-05 (J)				
1/13/2017			<0.0005						
1/16/2017						<0.0005			
2/27/2017									<0.0005
3/6/2017			<0.0005						
3/7/2017				<0.0005	<0.0005				
3/9/2017						<0.0005			
5/1/2017			<0.0005	<0.0005					
5/2/2017					<0.0005	<0.0005			
5/10/2017									0.0002 (J)
6/27/2017				<0.0005	<0.0005				
6/29/2017			<0.0005						
7/10/2017						<0.0005			
7/11/2017									0.0005 (J)
10/11/2017	<0.0005								
10/12/2017		<0.0005					0.003	0.0002 (J)	0.0006 (J)
11/20/2017	<0.0005	<0.0005					0.0027		
11/21/2017								0.0003 (J)	
1/10/2018		<0.0005							
1/11/2018	<0.0005							0.0002 (J)	
1/12/2018							0.0029		
2/19/2018		<0.0005						<0.0005	
2/20/2018	<0.0005						0.0029		
3/29/2018			<0.0005	<0.0005	<0.0005				
3/30/2018						<0.0005			
4/3/2018	<0.0005	<0.0005					0.0027	<0.0005	
4/4/2018									<0.0005
6/6/2018				<0.0005					
6/7/2018			<0.0005		<0.0005				
6/12/2018						<0.0005			
6/27/2018								0.00025 (J)	
6/28/2018	<0.0005	<0.0005					0.0029		
8/7/2018	<0.0005	<0.0005					0.0027	0.00024 (J)	
9/20/2018									0.0002 (J)
9/24/2018	<0.0005	<0.0005					0.0027	0.00021 (J)	
9/26/2018			<0.0005	<0.0005	<0.0005				
9/27/2018						<0.0005			
3/4/2019			<0.0005	<0.0005	<0.0005				
3/6/2019						<0.0005			
4/3/2019			<0.0005	<0.0005	<0.0005				
4/4/2019						<0.0005			

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	<0.0005	<0.0005							
8/22/2019							0.0023 (J)	0.00015 (J)	0.00017 (J)
9/24/2019				<0.0005	<0.0005				
9/25/2019			<0.0005						
9/27/2019						<0.0005			
10/9/2019	<0.0005	<0.0005					0.0021 (J)	0.00017 (J)	0.00025 (J)
2/12/2020	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005				
3/24/2020		<0.0005		<0.0005	<0.0005				
3/25/2020	<0.0005		<0.0005				0.0018 (J)	0.00018 (J)	0.00021 (J)
3/26/2020						<0.0005			
9/22/2020			<0.0005	<0.0005	<0.0005				
9/24/2020	<0.0005	<0.0005				<0.0005			0.00014 (J)
9/25/2020							0.0015 (J)	0.00014 (J)	
2/8/2021				<0.0005	<0.0005				
2/9/2021			<0.0005			<0.0005	0.0014 (J)		
2/10/2021	0.00019 (J)	<0.0005						<0.0005	<0.0005
3/2/2021				<0.0005	<0.0005				
3/3/2021			<0.0005						
3/4/2021	0.0003 (J)	<0.0005				<0.0005	0.0013	<0.0005	<0.0005
8/25/2021						<0.0005			<0.0005
8/26/2021	0.00049 (J)		<0.0005	<0.0005	<0.0005		0.0011	<0.0005	
9/3/2021		<0.0005							

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.0005
7/26/2016					<0.0005	<0.0005			
8/30/2016			0.0001 (J)						
8/31/2016	<0.0005			<0.0005					
9/1/2016		<0.0005							
9/13/2016						<0.0005	<0.0005		
9/14/2016								<0.0005	
9/15/2016					<0.0005				
9/19/2016									<0.0005
11/1/2016						<0.0005			<0.0005
11/2/2016					<0.0005				
11/4/2016							<0.0005	<0.0005	
11/14/2016			0.0001 (J)						
11/15/2016		<0.0005							
11/16/2016	<0.0005								
11/28/2016				<0.0005					
12/15/2016								<0.0005	
1/10/2017					<0.0005				
1/11/2017						0.0002 (J)			
1/16/2017							<0.0005	<0.0005	<0.0005
2/21/2017									<0.0005
2/22/2017				<0.0005					
2/24/2017	<0.0005		9E-05 (J)						
2/27/2017		7E-05 (J)							
3/2/2017						<0.0005	<0.0005		
3/3/2017								<0.0005	
3/8/2017					7E-05 (J)				
4/26/2017					<0.0005				<0.0005
4/27/2017						<0.0005	<0.0005		
4/28/2017								<0.0005	
5/8/2017			0.0001 (J)	<0.0005					

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.0005							
5/10/2017	<0.0005								
5/26/2017								<0.0005	
6/27/2017						<0.0005	<0.0005		
6/28/2017								<0.0005	
6/30/2017					<0.0005				<0.0005
7/11/2017	<0.0005		<0.0005						
7/13/2017		<0.0005							
7/17/2017				<0.0005					
10/10/2017			<0.0005						
10/11/2017		<0.0005							
10/12/2017	<0.0005								
10/16/2017				<0.0005					
2/19/2018				<0.0005					
3/27/2018					<0.0005		<0.0005		<0.0005
3/28/2018								<0.0005	
3/29/2018						<0.0005			
4/2/2018			<0.0005						
4/4/2018	<0.0005	<0.0005							
8/6/2018				<0.0005					
9/19/2018			<0.0005						
9/20/2018	<0.0005	<0.0005							
2/25/2019				<0.0005					
2/26/2019					<0.0005				<0.0005
2/27/2019						<0.0005	<0.0005	<0.0005	
3/28/2019						<0.0005	<0.0005		
3/29/2019					<0.0005			<0.0005	
4/1/2019									<0.0005
6/12/2019				<0.0005					
8/19/2019				<0.0005					
8/20/2019			<0.0005						
8/21/2019	<0.0005								
9/24/2019						<0.0005	<0.0005	<0.0005	
9/25/2019					<0.0005				<0.0005
9/26/2019		<0.0005							
10/8/2019			<0.0005	<0.0005					
10/9/2019	<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	<0.0005					
3/18/2020					<0.0005		<0.0005		
3/19/2020						<0.0005		<0.0005	<0.0005
3/25/2020	<0.0005	<0.0005							
8/26/2020				<0.0005					
8/27/2020			<0.0005						
9/22/2020				<0.0005					
9/23/2020						<0.0005	<0.0005	<0.0005	
9/24/2020		<0.0005							<0.0005
9/25/2020	<0.0005				<0.0005				
2/9/2021	<0.0005	<0.0005							
2/10/2021					<0.0005			<0.0005	

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Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
2/11/2021									<0.0005
2/12/2021						<0.0005	<0.0005		
3/1/2021									<0.0005
3/2/2021				<0.0005	<0.0005				
3/3/2021						<0.0005	<0.0005	<0.0005	
3/4/2021	<0.0005	<0.0005							
8/19/2021			<0.0005		<0.0005	<0.0005	<0.0005		<0.0005
8/20/2021				<0.0005					
8/27/2021								<0.0005	
9/1/2021		<0.0005							
9/27/2021	<0.0005								

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.0005					
6/2/2016	<0.0005						
6/8/2016					<0.0005		
7/25/2016		<0.0005					
7/26/2016	<0.0005						
8/1/2016					<0.0005		
9/2/2016						<0.0005	
9/14/2016		<0.0005					
9/15/2016	<0.0005						
9/20/2016					<0.0005		
11/1/2016	<0.0005	<0.0005					
11/8/2016					<0.0005		
11/14/2016						9E-05 (J)	
1/11/2017	0.0001 (J)	8E-05 (J)					
1/17/2017					<0.0005		
2/28/2017						0.0001 (J)	
3/1/2017		<0.0005					
3/2/2017	<0.0005						
3/8/2017					<0.0005		
4/26/2017	<0.0005	<0.0005					
5/2/2017					<0.0005		
5/9/2017						0.0002 (J)	
6/28/2017	<0.0005	<0.0005					
7/7/2017					<0.0005		
7/13/2017						0.0002 (J)	
9/22/2017						0.0002 (J)	
9/29/2017						0.0002 (J)	
10/6/2017						0.0002 (J)	
10/12/2017				0.0002 (J)			
11/21/2017				0.0002 (J)			
1/11/2018				0.0004 (J)			
2/20/2018				<0.0005			
3/28/2018	<0.0005	<0.0005					
3/30/2018					<0.0005	<0.0005	
4/3/2018				<0.0005			
6/12/2018					<0.0005		
6/13/2018						0.00019 (J)	
6/29/2018				0.00099 (J)			
8/6/2018				0.00063 (J)			
9/24/2018				0.00069 (J)			
9/26/2018					<0.0005	0.00018 (J)	
10/16/2018			<0.0005				
2/27/2019	<0.0005	<0.0005					
3/5/2019					<0.0005		
3/6/2019						0.00015 (J)	
4/1/2019	<0.0005	<0.0005					
4/4/2019					<0.0005	0.00019 (J)	
9/25/2019	<0.0005	<0.0005					
9/26/2019			<0.0005		<0.0005	0.00017 (J)	
2/11/2020		<0.0005					
2/12/2020	<0.0005						
3/19/2020	<0.0005	<0.0005					

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
3/25/2020			0.00016 (J)			0.00019 (J)	
3/26/2020					<0.0005		
9/23/2020	<0.0005	<0.0005			<0.0005		
9/24/2020			<0.0005				
9/25/2020				0.00039 (J)			
10/7/2020						0.00012 (J)	
2/9/2021				0.00042 (J)	<0.0005		
2/10/2021	<0.0005	<0.0005	<0.0005			<0.0005	
3/3/2021	<0.0005	<0.0005			<0.0005		
3/4/2021			<0.0005	0.00028 (J)		<0.0005	
8/19/2021	<0.0005						
8/25/2021				0.00094			
8/27/2021		<0.0005					
9/1/2021			<0.0005		<0.0005		
9/3/2021						<0.0005	<0.0005

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-3	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)
6/6/2016							6.2	1.4	
6/7/2016						2.2			2.3
7/27/2016						2	4.73	1.19	2.08
9/16/2016						1.97		1.5	
9/19/2016							4.76		1.97
11/2/2016									2.13
11/3/2016						1.99	5.25	1.31	
1/11/2017						2.28	4.74	1.25	
1/13/2017									2.45
3/1/2017							5.37	1.26	
3/2/2017						2.15			
3/6/2017									2.48
4/26/2017							4.28	1.05	2.3
5/2/2017						1.95			
6/28/2017							4.95	1.06	
6/29/2017						2.02			2.54
10/4/2017						2.03		1.1	2.25
10/5/2017							5.28		
6/6/2018									2.3
6/7/2018							4.8		
6/11/2018						2.1		1.4	
9/25/2018						2.1	4.6	1	2.3
10/16/2018	14.5 (J)								
4/2/2019						2.5			
4/3/2019							5.3	1.2	2.9
9/25/2019						2.6			2.4
9/26/2019	9.3						4.9	1.1	
3/24/2020						2.7	5.3	1	2.6
3/25/2020	4.5								
9/23/2020		1.7		10.5		2.6	5.2	0.91 (J)	
9/24/2020	4.8				61.3				2.6
3/3/2021	6.9	1.5		20.6		2.5	5.2	0.96 (J)	2.4
3/4/2021					53.8				
8/25/2021				11					
8/26/2021					45			0.98 (J)	
8/27/2021						2.7	5.1		2.4
9/1/2021	16.8	1.4							
9/3/2021			42.5						

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
6/2/2016				8.8	33	2.4			
6/7/2016	3.7						9.6		
7/26/2016				7.69	32.3	2.12			
7/28/2016	3.15						7.87		
9/14/2016				8.49	31	2.18			
9/19/2016	3.17								
9/20/2016							9.28		
11/2/2016				7.83	30.9				
11/3/2016	3.4								
11/4/2016						2.17 (J)			
11/8/2016							8.6		
1/12/2017					35.7	2.37			
1/13/2017	4.98			8.08					
1/16/2017							8.85		
3/6/2017	6.28			8.64					
3/7/2017					32.7	2.34			
3/9/2017							8.4		
4/26/2017	6.65								
5/1/2017				13.4	37				
5/2/2017						2.17	12.9		
6/27/2017					36.5	2.13			
6/29/2017	6.04			8.81					
7/10/2017							8.09		
10/3/2017	8.28				30.9	2.15			
10/5/2017				9.29					
10/11/2017		2.74					6.36		
10/12/2017			2.9					190	44.5
11/20/2017		1.81	10.4					184	
11/21/2017									44.4
1/10/2018			10.2						
1/11/2018		1.54							43.9
1/12/2018								178	
2/19/2018			<25						45.3
2/20/2018		1.71						184	
4/3/2018		1.4	6.3					174	42.7
6/5/2018	9.1								
6/6/2018					26.2				
6/7/2018				8.2		2.3			
6/12/2018							4.7		
6/27/2018									42.2
6/28/2018		1.4	6.7					190	
8/7/2018		1.2	6.3					176	40.7
9/24/2018		1.1	5.7					172	38.5
9/25/2018	10.4 (J)								
9/26/2018				9.5 (J)	25.8	2.3			
9/27/2018							4.1		
3/26/2019			5.6						
3/27/2019		1.5						155	
3/28/2019									26
4/2/2019	8.8								
4/3/2019				8.4	24.7 (J)	2.8			
4/4/2019							3.7		

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
9/24/2019	7.7				25.8	2.5			
9/25/2019				9.5					
9/27/2019							3.7		
10/9/2019		2.4	4.9					133	27.6
3/24/2020	6		4.8		26.1	2.5			
3/25/2020		2.7		10.5				124	29.6
3/26/2020							5.6		
9/22/2020				9.6	27.2	2.6			
9/24/2020	7.8	3.7	4.4				7.9		
9/25/2020								93.7	20.5
3/2/2021					1.6	2.6			
3/3/2021				7.7					
3/4/2021	8.7	8.2	4.6				10.2	87	16.4
8/25/2021							10.6		
8/26/2021		14.1		7.6	25.2	2.5		73.6	12.8
9/1/2021	9.5								
9/3/2021			5.6						

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (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						1.3			
7/25/2016								2.16	
7/26/2016						1.24	11		
8/30/2016	133			20.9					
8/31/2016		3.4			9.31				
9/1/2016			13.9						
9/13/2016							11.8	2.21	
9/14/2016									23.5
9/15/2016						1.17			
11/1/2016							11		
11/2/2016						1.23			
11/4/2016								2.67	23.7
11/14/2016				18.6					
11/15/2016			13.5						
11/16/2016	125	3.79							
11/28/2016					9.47 (B)				
12/15/2016									23.1
1/10/2017						1.24			
1/11/2017							11.2		
1/16/2017								2.45	23.3
2/22/2017					10.4				
2/24/2017		6.42		16.1					
2/27/2017	139		12.5						
3/2/2017							11	2.57	
3/3/2017									25.1
3/8/2017						1.21			
4/26/2017						1.14			
4/27/2017							11.1	2.38	
4/28/2017									30.7
5/8/2017				14.6	14.2				
5/9/2017			14.4						
5/10/2017	130	7.9							
5/26/2017									26.2
6/27/2017							13.8	2.36	
6/28/2017									26.1
6/30/2017						1.24			
7/11/2017	172	6.71		14.3					
7/13/2017			14.1						
7/17/2017					14.1				
10/3/2017							14	2.21	26.7
10/5/2017						1.11			
10/10/2017				12.1					
10/11/2017			12.4						
10/12/2017	144	7.05							
10/16/2017					13.6				
2/19/2018					<25				
4/2/2018				<25					
4/4/2018	137	8.6	<25						
6/5/2018							15.2 (J)		
6/6/2018								2.3	
6/7/2018									25

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/8/2018						1.1			
8/6/2018					11.4 (J)				
9/19/2018				11.1 (J)					
9/20/2018	108	15.9 (J)	12 (J)						
10/1/2018						0.99	15.1	1.8	25
2/25/2019					12.7 (J)				
3/27/2019	109			10.8 (J)					
3/28/2019		8.9	11.3 (J)				13.3 (J)	2.2	
3/29/2019						1.1			23.5 (J)
6/12/2019					18.9				
9/24/2019							15.8	2.3	26.4
9/25/2019						1.1			
9/26/2019			12.1						
10/8/2019				9.7	28.3				
10/9/2019	92	18.2							
3/17/2020				14.8	24.3				
3/18/2020						1.1		2.1	
3/19/2020							15		27.4
3/25/2020	107	12.1	13.2						
9/22/2020				10.1	31				
9/23/2020							14.1	1.8	26.3
9/24/2020	84.3		12						
9/25/2020		19.8				1.3			
3/1/2021				10.3					
3/2/2021					34.2	1.2			
3/3/2021							14.1	1.8	25.6
3/4/2021	90.7	32.2	13						
8/19/2021				9.6		1.2	14.2	2	
8/20/2021					26.5				
8/25/2021	79.9								
8/27/2021									22.6
9/1/2021			12.1						
9/27/2021		4.1							

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016			21					
6/2/2016	1.3	28						
6/8/2016						1.9		
7/25/2016	1.17		20.3					
7/26/2016		24.5						
8/1/2016						1.83		
9/2/2016							11.2	
9/14/2016			19.7					
9/15/2016		27						
9/19/2016	1.05							
9/20/2016						1.78		
11/1/2016	1.14	25.6	18.4					
11/8/2016						1.77		
11/14/2016							7.79	
1/11/2017		27.5	20.3					
1/16/2017	1.23							
1/17/2017						1.7		
2/21/2017	1.25							
2/28/2017							8.37	
3/1/2017			18.6					
3/2/2017		27.5						
3/8/2017						1.77		
4/26/2017	1.03	30.4	25.6					
5/2/2017						1.57		
5/9/2017							13.9	
6/28/2017		29.8	23.9					
6/30/2017	1.13							
7/7/2017						1.8		
7/13/2017							16.6	
9/22/2017							18.4	
9/29/2017							16.1	
10/4/2017	1.09	29.7	22.1					
10/5/2017						1.7		
10/6/2017							16.6	
10/11/2017							18.1	
10/12/2017					122			
11/21/2017					118			
1/11/2018					119			
2/20/2018					124			
4/3/2018					114			
6/7/2018		29.1						
6/8/2018			21.9 (J)					
6/11/2018	1.1							
6/12/2018						1.8		
6/13/2018							18.7 (J)	
6/29/2018					129			
8/6/2018					114			
9/24/2018					115			
9/26/2018						1.7	19.8 (J)	
10/1/2018		26.9	19.7					
10/2/2018	1.1							
10/16/2018				6.5				

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
4/1/2019	1.3	30.1	20.4 (J)					
4/4/2019						1.9	16.9 (J)	
9/25/2019	1.1	29.5	22.4					
9/26/2019				4.7		1.7	11.7	
3/19/2020	1.2	31.5	21.9					
3/25/2020				7.9			10.6	
3/26/2020						1.7		
9/23/2020		28.6	23.6			2.4		
9/24/2020	1.1			3.6				
9/25/2020					108			
10/7/2020							9.9	
3/1/2021	1.2							
3/3/2021		29.8	20.6			2.4		
3/4/2021				4.4	118		5.6	
8/19/2021	1.2	28.1						
8/25/2021					106			
8/27/2021			24.7					
9/1/2021				7.9		2.3		
9/3/2021							4.1	64

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						6.8	6.4		
6/7/2016					4.5			1.9	2.8
7/27/2016					4.5	6.7	6.2	1.9	
7/28/2016									2.6
9/16/2016					4.5		6.1		
9/19/2016						7		1.9	2.4
11/2/2016								2.6	
11/3/2016					5.4	7.5	7.4		2.9
1/11/2017					4.7	6.5	6.1		
1/13/2017								2.3	2.5
3/1/2017						6.9	6		
3/2/2017					4.8				
3/6/2017								1.9	2.1
4/26/2017						7	6.5	2	2.1
5/2/2017					4.6				
6/28/2017						7	6.4		
6/29/2017					4.5			2.6	2.8
10/3/2017									2.2
10/4/2017					4.7		6.8	2.6	
10/5/2017						7			
6/5/2018									1.7
6/6/2018								2.7	
6/7/2018						6.8			
6/11/2018					4.9		6.8		
9/25/2018					5.6	7.9	7.8	3.6	2.2
10/16/2018	12.1								
4/2/2019					4.8				2.5
4/3/2019						6.9	6.3	3.1	
9/24/2019									3.1
9/25/2019					5.7			2.8	
9/26/2019	6.4					7	7.1		
3/24/2020					5	7	6.8	2.7	2.8
3/25/2020	7.7								
9/23/2020		2.7	1.8		6.6	7.2	7.2		
9/24/2020	6.6			3.7				2.7	2
3/3/2021	6.1	2.5	22.9		7.1	7	7.2	2.7	
3/4/2021				3.7					1.8
8/25/2021			1.5						
8/26/2021				3.9			7.3		
8/27/2021					8.5	7.4		2.8	
9/1/2021	5.7	2.6							1.8

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			3.7	7.2	4.3				
6/7/2016						2.9			
7/26/2016			3.6	6.6	4.4				
7/28/2016						3.5			
8/30/2016									4.4
9/14/2016			3.4	6.6	3.8				
9/20/2016						2.4			
11/2/2016			4.5	7.6					
11/4/2016					4.8				
11/8/2016						2.8			
11/16/2016									4.7
1/12/2017				6.8	3.8				
1/13/2017			4.2						
1/16/2017						1.8			
2/27/2017									4.7
3/6/2017			3.6						
3/7/2017				6.8	4.5				
3/9/2017						1.7			
5/1/2017			4.3	7.2					
5/2/2017					4.6	1.8			
5/10/2017									4.4
6/27/2017				7	4.3				
6/29/2017			4.2						
7/10/2017						1.9			
7/11/2017									4.7
10/3/2017				6.5	4.2				
10/5/2017			4.7						
10/11/2017	2.4					2.4			
10/12/2017		3.8					6	3.1	4.3
11/20/2017	1.8	4.4					6.9		
11/21/2017								4.2	
1/10/2018		4.6							
1/11/2018	1.6							3.8	
1/12/2018							6.6		
2/19/2018		4.6						3.5	
2/20/2018	2						6.2		
4/3/2018	3.3	5.9					6.9	4.4	
4/4/2018									3.7
6/6/2018				4.7					
6/7/2018			4.4		4.5				
6/12/2018						1.8			
6/27/2018								3.6	
6/28/2018	2.1	5					6.4		
8/7/2018	1.2	4.3					5.5	3.3	
9/20/2018									3.8
9/24/2018	1.3	4.9					5.9	3.3	
9/26/2018			4.8	4.8	5.1				
9/27/2018						2			
3/26/2019		4.4							
3/27/2019	1.4						6.2		3.9
3/28/2019								3.2	
4/3/2019			4.3	4	4.2				

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						1.7			
9/24/2019				3.7	4.5				
9/25/2019			4.5						
9/27/2019						1.7			
10/9/2019	2.1	5.1					5	3.3	4.1
3/24/2020		4.7		3.5	4.3				
3/25/2020	1.9		3.9				4	2.7	3.2
3/26/2020						1.6			
9/22/2020			4.5	3.6	4.2				
9/24/2020	2.7	5				2			3.3
9/25/2020							4	3	
3/2/2021				3.2	4.3				
3/3/2021			4.1						
3/4/2021	4.9	4.9				1.8	3.9	3.4	2.7
8/25/2021						2.5			3.4
8/26/2021	7.2		4.4	3.4	4.3		4.1	3.6	
9/3/2021		5.5							

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						1.3	1.6		
6/2/2016					4.1				1.9
7/25/2016							1.4		1.7
7/26/2016					4	1.2			
8/30/2016			5.2						
8/31/2016	1.5			4					
9/1/2016		5.3							
9/13/2016						1.1	1.3		
9/14/2016								1.1	
9/15/2016					4.2				
9/19/2016									1.6
11/1/2016						1.3			1.8
11/2/2016					4.9				
11/4/2016							1.6	1.4	
11/14/2016			6.4						
11/15/2016		5.8							
11/16/2016	1.7								
11/28/2016				4.2					
12/15/2016								2.9	
1/10/2017					4.1				
1/11/2017						1.1			
1/16/2017							1.4	0.98	1.7
2/21/2017									1.7
2/22/2017				3.7					
2/24/2017	1.5		5.5						
2/27/2017		4.6							
3/2/2017						1	1.3		
3/3/2017								1.1	
3/8/2017					4.2				
4/26/2017					4.1				1.7
4/27/2017						1	1.3		
4/28/2017								0.91	
5/8/2017			5.8	4.2					
5/9/2017		5.3							
5/10/2017	1.2								
5/26/2017								0.93	
6/27/2017						1.1	1.4		
6/28/2017								1	
6/30/2017					3.7				1.8
7/11/2017	1.5		5.8						
7/13/2017		4.7							
7/17/2017				3.8					
10/3/2017						1.1	1.7	1.2	
10/4/2017									1.8
10/5/2017					3.8				
10/10/2017			5.9						
10/11/2017		5.8							
10/12/2017	1.6								
10/16/2017				4.2					
2/19/2018				4.3					
4/2/2018			4.8						
4/4/2018	1.8	4.3							

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						1.1			
6/6/2018							1.4		
6/7/2018								1	
6/8/2018					3.4				
6/11/2018									2
8/6/2018				3.8					
9/19/2018			4						
9/20/2018	1.9	4.8							
10/1/2018					3.8	1.1	1.4	1.1	
10/2/2018									1.8
2/25/2019				4.1					
3/27/2019			4.3						
3/28/2019	1.8	4.4				1.4	1.5		
3/29/2019					4.2			1.2	
4/1/2019									1.7
6/12/2019				4.7					
9/24/2019						1.1	1.3	0.95 (J)	
9/25/2019					4.8				1.6
9/26/2019		5							
10/8/2019			4.4	5.1					
10/9/2019	2.3								
3/17/2020			4.1	4.8					
3/18/2020					5.2		1.4		
3/19/2020						1.1		0.97 (J)	1.8
3/25/2020	1.8	4.1							
9/22/2020			4.2	4.2					
9/23/2020						0.99 (J)	1.2	0.88 (J)	
9/24/2020		4.6							1.5
9/25/2020	2.3				5.3				
3/1/2021			3.7						1.6
3/2/2021				4.1	4.9				
3/3/2021						0.96 (J)	1.2	0.86 (J)	
3/4/2021	2.1	4.1							
8/19/2021			3.5		5	1.1	1.3		1.6
8/20/2021				5.2					
8/27/2021								0.99 (J)	
9/1/2021		4.4							
9/27/2021	1.1								

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		1.3					
6/2/2016	1.4						
6/8/2016					5.9		
7/25/2016		1.3					
7/26/2016	1.6						
8/1/2016					5.3		
9/2/2016						6.3	
9/14/2016		1.3					
9/15/2016	1.5						
9/20/2016					5.5		
11/1/2016	1.7	1.4					
11/8/2016					6.4		
11/14/2016						6.7	
1/11/2017	1.2	1.1					
1/17/2017					5.5		
2/28/2017						5.4	
3/1/2017		1.1					
3/2/2017	1.2						
3/8/2017					5.4		
4/26/2017	1.2	1.1					
5/2/2017					5.7		
5/9/2017						5.7	
6/28/2017	1.3	1.2					
7/7/2017					5.7		
7/13/2017						5.4	
9/22/2017						6.9	
9/29/2017						5.5	
10/4/2017	1.5	1.2					
10/5/2017					6		
10/6/2017						5.5	
10/11/2017						6.4	
10/12/2017				5.4			
11/21/2017				6.5			
1/11/2018				5			
2/20/2018				5.2			
4/3/2018				4.8			
6/7/2018	1.2						
6/8/2018		1.2					
6/12/2018					6.2		
6/13/2018						5.6	
6/29/2018				5.7			
8/6/2018				4.8			
9/24/2018				4.9			
9/26/2018					6.9	6	
10/1/2018	1.5	1.2					
10/16/2018			8.5				
4/1/2019	1.2	1.1					
4/4/2019					5.9	5.4	
9/25/2019	1.1	1.1					
9/26/2019			7.5		6.5	7.1	
3/19/2020	1.2	1.1					
3/25/2020			6.8			6.3	

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
3/26/2020					5.4		
9/23/2020	1.1	1			9.3		
9/24/2020			7.5				
9/25/2020				4.3			
10/7/2020						8.7	
3/3/2021	1.1	0.99 (J)			8.6		
3/4/2021			6.7	3.9		6.6	
8/19/2021	1.1						
8/25/2021				7			
8/27/2021		1.1					
9/1/2021			6.3		8.9		
9/3/2021						7	7.1

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						0.0012 (J)	<0.005		
6/7/2016					<0.005			<0.005	<0.005
7/27/2016					0.0008 (J)	0.0007 (J)	0.0006 (J)	0.0005 (J)	
7/28/2016									<0.005
9/16/2016					<0.005		<0.005		
9/19/2016						<0.005		<0.005	<0.005
11/2/2016								<0.005	
11/3/2016					<0.005	<0.005	<0.005		<0.005
1/11/2017					<0.005	<0.005	<0.005		
1/13/2017								<0.005	<0.005
3/1/2017						0.0012 (J)	<0.005		
3/2/2017					0.001 (J)				
3/6/2017								<0.005	<0.005
4/26/2017						0.0005 (J)	0.0003 (J)	0.0007 (J)	<0.005
5/2/2017					0.0007 (J)				
6/28/2017						0.0006 (J)	<0.005		
6/29/2017					0.0006 (J)			0.0005 (J)	<0.005
3/28/2018					<0.005	<0.005	<0.005		
3/29/2018								<0.005	<0.005
3/5/2019					<0.005		<0.005	<0.005	<0.005
3/6/2019						<0.005			
2/11/2020					0.00087 (J)	0.001 (J)	0.00088 (J)		
2/12/2020								0.00045 (J)	<0.005
3/24/2020					0.00087 (J)	0.00095 (J)	0.0011 (J)	0.00077 (J)	<0.005
3/25/2020	0.00058 (J)								
9/23/2020		0.00071 (J)	<0.005		0.00098 (J)	0.00092 (J)	0.0012 (J)		
9/24/2020	0.00074 (J)			<0.005				0.00076 (J)	<0.005
2/9/2021	0.001 (J)	0.0011 (J)	0.00057 (J)	<0.005		0.00083 (J)	0.0013 (J)	0.00056 (J)	<0.005
3/3/2021	0.00076 (J)	0.0012 (J)	<0.005		0.00082 (J)	0.00087 (J)	0.001 (J)	<0.005	
3/4/2021				<0.005					<0.005
8/25/2021			<0.005						
8/26/2021				<0.005			<0.005		
8/27/2021					<0.005	<0.005		<0.005	
9/1/2021	<0.005	0.003 (J)							<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.005	<0.005	<0.005				
6/7/2016						<0.005			
7/26/2016			<0.005	<0.005	<0.005				
7/28/2016						0.0008 (J)			
8/30/2016									<0.005
9/14/2016			<0.005	<0.005	<0.005				
9/20/2016						<0.005			
11/2/2016			<0.005	<0.005					
11/4/2016					<0.005				
11/8/2016						<0.005			
11/16/2016									<0.005
1/12/2017				<0.005	<0.005				
1/13/2017			<0.005						
1/16/2017						<0.005			
2/27/2017									<0.005
3/6/2017			<0.005						
3/7/2017				<0.005	<0.005				
3/9/2017						<0.005			
5/1/2017			<0.005	0.0004 (J)					
5/2/2017					<0.005	0.0007 (J)			
5/10/2017									0.0006 (J)
6/27/2017				<0.005	<0.005				
6/29/2017			<0.005						
7/10/2017						<0.005			
7/11/2017									<0.005
10/11/2017	<0.005								
10/12/2017		<0.005					0.0005 (J)	<0.005	<0.005
11/20/2017	<0.005	<0.005					<0.005		
11/21/2017								<0.005	
1/10/2018		<0.005							
1/11/2018	<0.005							<0.005	
1/12/2018							<0.005		
2/19/2018		<0.005						<0.005	
2/20/2018	<0.005						<0.005		
3/29/2018			<0.005	<0.005	<0.005				
3/30/2018						<0.005			
4/3/2018	<0.005	<0.005					<0.005	<0.005	
4/4/2018									<0.005
6/27/2018								<0.005	
6/28/2018	<0.005	<0.005					<0.005		
8/7/2018	<0.005	<0.005					<0.005	<0.005	
9/20/2018									<0.005
9/24/2018	<0.005	<0.005					<0.005	<0.005	
3/4/2019			<0.005	<0.005	<0.005				
3/6/2019						<0.005			
8/21/2019	<0.005	0.00053 (J)							
8/22/2019							<0.005	<0.005	<0.005
10/9/2019	<0.005	0.0012 (J)					<0.005	<0.005	0.00043 (J)
2/12/2020	<0.005	0.00065 (J)	<0.005	<0.005	0.00043 (J)				
3/24/2020		0.00055 (J)		<0.005	0.0014 (J)				
3/25/2020	<0.005		0.00058 (J)				0.00065 (J)	0.00039 (J)	0.0013 (J)
3/26/2020						0.0019 (J)			

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
9/22/2020			<0.005	0.0011 (J)	<0.005				
9/24/2020	<0.005	<0.005				0.0011 (J)			<0.005
9/25/2020							<0.005	<0.005	
2/8/2021				<0.005	<0.005				
2/9/2021			<0.005			0.00086 (J)	<0.005		
2/10/2021	<0.005	<0.005						<0.005	<0.005
3/2/2021				<0.005	<0.005				
3/3/2021			0.0013 (J)						
3/4/2021	<0.005	<0.005				0.00078 (J)	<0.005	<0.005	<0.005
8/25/2021						<0.005			<0.005
8/26/2021	<0.005		<0.005	<0.005	<0.005		<0.005	<0.005	
9/3/2021		<0.005							

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.005
7/26/2016					<0.005	<0.005			
8/30/2016			<0.005						
8/31/2016	<0.005			<0.005					
9/1/2016		0.0013 (J)							
9/13/2016						<0.005	<0.005		
9/14/2016								<0.005	
9/15/2016					<0.005				
9/19/2016									<0.005
11/1/2016						<0.005			<0.005
11/2/2016					<0.005				
11/4/2016							<0.005	<0.005	
11/14/2016			0.0093 (J)						
11/15/2016		0.0014 (J)							
11/16/2016	<0.005								
11/28/2016				<0.005					
12/15/2016								<0.005	
1/10/2017					<0.005				
1/11/2017						<0.005			
1/16/2017							<0.005	<0.005	<0.005
2/21/2017									<0.005
2/22/2017				<0.005					
2/24/2017	<0.005		<0.005						
2/27/2017		0.0016 (J)							
3/2/2017						0.0009 (J)	0.0004 (J)		
3/3/2017								0.0005 (J)	
3/8/2017					<0.005				
4/26/2017					<0.005				0.0016 (J)
4/27/2017						<0.005	<0.005		
4/28/2017								0.0004 (J)	
5/8/2017			<0.005	<0.005					

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		0.0017 (J)							
5/10/2017	0.0005 (J)								
5/26/2017								<0.005	
6/27/2017						<0.005	<0.005		
6/28/2017								<0.005	
6/30/2017					<0.005				<0.005
7/11/2017	<0.005		<0.005						
7/13/2017		0.0019 (J)							
7/17/2017				<0.005					
10/10/2017			<0.005						
10/11/2017		0.0014 (J)							
10/12/2017	<0.005								
10/16/2017				<0.005					
2/19/2018				<0.005					
3/27/2018					<0.005		<0.005		<0.005
3/28/2018								<0.005	
3/29/2018						<0.005			
4/2/2018			<0.005						
4/4/2018	<0.005	<0.005							
8/6/2018				<0.005					
9/19/2018			<0.005						
9/20/2018	<0.005	0.0017 (J)							
2/25/2019				<0.005					
2/26/2019					<0.005				<0.005
2/27/2019						<0.005	<0.005	<0.005	
3/28/2019						<0.005	0.0021 (J)		
3/29/2019					<0.005			<0.005	
4/1/2019									<0.005
6/12/2019				<0.005					
8/19/2019				<0.005					
8/20/2019			<0.005						
8/21/2019	0.00062 (J)								
9/24/2019						0.00072 (J)	0.0028 (J)	<0.005	
9/25/2019					<0.005				<0.005
10/8/2019				<0.005					
10/9/2019	0.00074 (J)								
2/10/2020						0.00042 (J)	<0.005		
2/11/2020								<0.005	
2/12/2020					<0.005				<0.005
3/17/2020				<0.005					
3/18/2020					<0.005		0.00044 (J)		
3/19/2020						0.00084 (J)		0.00048 (J)	<0.005
3/25/2020	<0.005	0.0019 (J)							
8/26/2020				<0.005					
8/27/2020			<0.005						
9/22/2020			<0.005	<0.005					
9/23/2020						0.00062 (J)	0.00058 (J)	<0.005	
9/24/2020		0.0019 (J)							<0.005
9/25/2020	0.00071 (J)				<0.005				
2/9/2021	<0.005	0.002 (J)							
2/10/2021					<0.005			<0.005	
2/11/2021									<0.005

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
2/12/2021						<0.005	<0.005		
3/1/2021			<0.005						<0.005
3/2/2021				<0.005	<0.005				
3/3/2021						<0.005	<0.005	<0.005	
3/4/2021	<0.005	0.0017 (J)							
8/19/2021			<0.005		<0.005	<0.005	<0.005		<0.005
8/20/2021				<0.005					
8/27/2021								<0.005	
9/1/2021		0.002 (J)							
9/27/2021	<0.005								

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.005					
6/2/2016	0.0013 (J)						
6/8/2016					<0.005		
7/25/2016		<0.005					
7/26/2016	<0.005						
8/1/2016					<0.005		
9/2/2016						<0.005	
9/14/2016		<0.005					
9/15/2016	<0.005						
9/20/2016					<0.005		
11/1/2016	<0.005	<0.005					
11/8/2016					<0.005		
11/14/2016						0.0035	
1/11/2017	<0.005	<0.005					
1/17/2017					<0.005		
2/28/2017						<0.005	
3/1/2017		0.0004 (J)					
3/2/2017	0.0006 (J)						
3/8/2017					<0.005		
4/26/2017	<0.005	<0.005					
5/2/2017					0.0011 (J)		
5/9/2017						<0.005	
6/28/2017	<0.005	<0.005					
7/7/2017					<0.005		
7/13/2017						<0.005	
9/22/2017						<0.005	
9/29/2017						<0.005	
10/6/2017						<0.005	
10/12/2017				0.0019 (J)			
11/21/2017				0.0017 (J)			
1/11/2018				0.001 (J)			
2/20/2018				<0.005			
3/28/2018	<0.005	<0.005					
3/30/2018					<0.005	<0.005	
4/3/2018				<0.005			
6/29/2018				<0.005			
8/6/2018				<0.005			
9/24/2018				<0.005			
2/27/2019	<0.005	<0.005					
3/5/2019					<0.005		
3/6/2019						<0.005	
4/1/2019	<0.005	<0.005					
9/25/2019	0.0014 (J)	0.0019 (J)					
2/11/2020		<0.005					
2/12/2020	<0.005						
3/19/2020	<0.005	<0.005					
3/25/2020			0.0012 (J)			0.00074 (J)	
3/26/2020					0.00094 (J)		
9/23/2020	<0.005	<0.005			<0.005		
9/24/2020			0.00061 (J)				
9/25/2020				<0.005			
10/7/2020						0.0013 (J)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
2/9/2021				<0.005	0.0011 (J)		
2/10/2021	<0.005	<0.005	0.0006 (J)			0.00094 (J)	
3/3/2021	<0.005	<0.005			<0.005		
3/4/2021			0.0007 (J)	<0.005		<0.005	
8/19/2021	<0.005						
8/25/2021				<0.005			
8/27/2021		<0.005					
9/1/2021			<0.005		<0.005		
9/3/2021						<0.005	<0.005

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.005	0.00061 (J)		
6/7/2016					<0.005			<0.005	0.0056
7/27/2016					<0.005	<0.005	0.0004 (J)	<0.005	
7/28/2016									0.0032 (J)
9/16/2016					<0.005		0.0008 (J)		
9/19/2016						<0.005		<0.005	0.0047 (J)
11/2/2016								<0.005	
11/3/2016					<0.005	<0.005	<0.005		0.013
1/11/2017					<0.005	<0.005	<0.005		
1/13/2017								<0.005	0.011
3/1/2017						<0.005	<0.005		
3/2/2017					<0.005				
3/6/2017								<0.005	0.011
4/26/2017						<0.005	<0.005	<0.005	0.009 (J)
5/2/2017					<0.005				
6/28/2017						<0.005	<0.005		
6/29/2017					<0.005			<0.005	0.0093 (J)
3/28/2018					<0.005	<0.005	<0.005		
3/29/2018								<0.005	<0.005
6/5/2018									0.0041 (J)
6/6/2018								<0.005	
6/7/2018						<0.005			
6/11/2018					<0.005		<0.005		
9/25/2018					<0.005	<0.005	<0.005	<0.005	0.0044 (J)
10/16/2018	0.032								
3/5/2019					<0.005		<0.005	<0.005	0.0039 (J)
3/6/2019						<0.005			
4/2/2019					<0.005				0.0039 (J)
4/3/2019						<0.005	<0.005	<0.005	
9/24/2019									0.0032 (J)
9/25/2019					<0.005			<0.005	
9/26/2019	0.015					<0.005	<0.005		
1/3/2020	<0.005								
2/11/2020					<0.005	<0.005	<0.005		
2/12/2020								<0.005	0.0081
3/24/2020					<0.005	<0.005	<0.005	<0.005	0.0061
3/25/2020	<0.005								
9/23/2020		0.0025 (J)	0.00052 (J)		<0.005	<0.005	<0.005		
9/24/2020	0.01			0.00077 (J)				<0.005	0.0079
2/9/2021	0.03	0.001 (J)	0.00063 (J)	<0.005		<0.005	<0.005	<0.005	0.009
3/3/2021	0.018	0.00082 (J)	0.001 (J)		<0.005	<0.005	<0.005	<0.005	
3/4/2021				<0.005					0.0065
8/25/2021			0.00041 (J)						
8/26/2021				<0.005			<0.005		
8/27/2021					<0.005	<0.005		<0.005	
9/1/2021	0.022	0.00093 (J)							0.0068

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			0.00082 (J)	<0.005	<0.005				
6/7/2016						<0.005			
7/26/2016			0.0012 (J)	<0.005	<0.005				
7/28/2016						<0.005			
8/30/2016									0.0025 (J)
9/14/2016			0.0006 (J)	<0.005	<0.005				
9/20/2016						<0.005			
11/2/2016			<0.005	<0.005					
11/4/2016					<0.005				
11/8/2016						<0.005			
11/16/2016									0.002 (J)
1/12/2017				<0.005	<0.005				
1/13/2017			0.0029 (J)						
1/16/2017						<0.005			
2/27/2017									0.0021 (J)
3/6/2017			0.0006 (J)						
3/7/2017				<0.005	<0.005				
3/9/2017						<0.005			
5/1/2017			<0.005	<0.005					
5/2/2017					<0.005	<0.005			
5/10/2017									0.0021 (J)
6/27/2017				<0.005	<0.005				
6/29/2017			0.0005 (J)						
7/10/2017						<0.005			
7/11/2017									0.0014 (J)
10/11/2017	<0.005								
10/12/2017		<0.005					<0.005	0.0011 (J)	0.0017 (J)
11/20/2017	<0.005	<0.005					<0.005		
11/21/2017								0.0003 (J)	
1/10/2018		<0.005							
1/11/2018	<0.005							0.0003 (J)	
1/12/2018							<0.005		
2/19/2018		<0.005						<0.005	
2/20/2018	<0.005						<0.005		
3/29/2018			<0.005	<0.005	<0.005				
3/30/2018						<0.005			
4/3/2018	<0.005	<0.005					<0.005	<0.005	
4/4/2018									<0.005
6/6/2018				<0.005					
6/7/2018			0.00058 (J)		<0.005				
6/12/2018						<0.005			
6/27/2018								0.00069 (J)	
6/28/2018	<0.005	<0.005					<0.005		
8/7/2018	<0.005	<0.005					<0.005	<0.005	
9/20/2018									0.003 (J)
9/24/2018	<0.005	<0.005					<0.005	<0.005	
9/26/2018			<0.005	<0.005	<0.005				
9/27/2018						<0.005			
3/4/2019			<0.005	<0.005	<0.005				
3/6/2019						<0.005			
4/3/2019			0.00083 (J)	<0.005	<0.005				
4/4/2019						<0.005			

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	0.00034 (J)	<0.005							
8/22/2019							<0.005	<0.005	0.0019 (J)
9/24/2019				<0.005	<0.005				
9/25/2019			<0.005						
9/27/2019						<0.005			
10/9/2019	<0.005	<0.005					<0.005	<0.005	0.0019 (J)
2/12/2020	0.00034 (J)	<0.005	<0.005	0.00037 (J)	<0.005				
3/24/2020		<0.005		0.00035 (J)	<0.005				
3/25/2020	0.00034 (J)		0.00056 (J)				<0.005	<0.005	0.0018 (J)
3/26/2020						<0.005			
9/22/2020			<0.005	<0.005	<0.005				
9/24/2020	0.00053 (J)	<0.005				<0.005			0.0017 (J)
9/25/2020							<0.005	<0.005	
2/8/2021				<0.005	<0.005				
2/9/2021			<0.005			<0.005	<0.005		
2/10/2021	0.00098 (J)	<0.005						<0.005	0.0019 (J)
3/2/2021				<0.005	<0.005				
3/3/2021			<0.005						
3/4/2021	0.00071 (J)	<0.005				<0.005	<0.005	<0.005	0.0018 (J)
8/25/2021						<0.005			0.0014 (J)
8/26/2021	0.0011 (J)		0.00042 (J)	<0.005	<0.005		<0.005	<0.005	
9/3/2021		<0.005							

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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				0.035
7/25/2016							0.0008 (J)		0.0312
7/26/2016					<0.005	<0.005			
8/30/2016			0.0073 (J)						
8/31/2016	<0.005			0.0053 (J)					
9/1/2016		<0.005							
9/13/2016						<0.005	0.0009 (J)		
9/14/2016								<0.005	
9/15/2016					<0.005				
9/19/2016									0.0275
11/1/2016						<0.005			0.0255
11/2/2016					<0.005				
11/4/2016							0.0025 (J)	<0.005	
11/14/2016			0.0115						
11/15/2016		0.0006 (J)							
11/16/2016	<0.005								
11/28/2016				0.0036 (J)					
12/15/2016								<0.005	
1/10/2017					<0.005				
1/11/2017						<0.005			
1/16/2017							0.0027 (J)	<0.005	0.0245
2/21/2017									0.0272
2/22/2017				0.0049 (J)					
2/24/2017	<0.005		0.0106						
2/27/2017		0.0008 (J)							
3/2/2017						<0.005	0.0022 (J)		
3/3/2017								<0.005	
3/8/2017					<0.005				
4/26/2017					<0.005				0.0244
4/27/2017						<0.005	0.0018 (J)		
4/28/2017								<0.005	
5/8/2017			0.0099 (J)	0.0059 (J)					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.005							
5/10/2017	<0.005								
5/26/2017								<0.005	
6/27/2017						<0.005	0.0023 (J)		
6/28/2017								<0.005	
6/30/2017					<0.005				0.0233
7/11/2017	<0.005		0.0096 (J)						
7/13/2017		0.0005 (J)							
7/17/2017				0.0046 (J)					
10/10/2017			0.0036 (J)						
10/11/2017		0.0006 (J)							
10/12/2017	0.0006 (J)								
10/16/2017				0.0034 (J)					
2/19/2018				<0.005					
3/27/2018					<0.005		<0.005		0.023
3/28/2018								<0.005	
3/29/2018						<0.005			
4/2/2018			<0.005						
4/4/2018	<0.005	<0.005							
6/5/2018						<0.005			
6/6/2018							<0.005		
6/7/2018								<0.005	
6/8/2018					<0.005				
6/11/2018									0.023
8/6/2018				0.003 (J)					
9/19/2018			0.0036 (J)						
9/20/2018	0.0034 (J)	<0.005							
10/1/2018					<0.005	<0.005	0.00059 (J)	<0.005	
10/2/2018									0.022
2/25/2019				0.001 (J)					
2/26/2019					<0.005				0.021
2/27/2019						<0.005	0.00064 (J)	<0.005	
3/28/2019						<0.005	0.00091 (J)		
3/29/2019					<0.005			<0.005	
4/1/2019									0.022
6/12/2019				0.003 (J)					
8/19/2019				0.0035 (J)					
8/20/2019			0.00092 (J)						
8/21/2019	0.0026 (J)								
9/24/2019						<0.005	0.0013 (J)	<0.005	
9/25/2019					<0.005				0.016
9/26/2019		<0.005							
10/8/2019			0.0014 (J)	0.0039 (J)					
10/9/2019	0.0023 (J)								
2/10/2020						<0.005	0.0016 (J)		
2/11/2020								<0.005	
2/12/2020					<0.005				0.014
3/17/2020			0.0017 (J)	0.003 (J)					
3/18/2020					<0.005		0.00087 (J)		
3/19/2020						<0.005		<0.005	0.014
3/25/2020	0.0016 (J)	<0.005							
8/26/2020				0.2 (O)					

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/27/2020			0.0011 (J)						
9/22/2020			0.00097 (J)	0.16 (O)					
9/23/2020						<0.005	0.0013 (J)	<0.005	
9/24/2020		<0.005							0.0064
9/25/2020	0.0018 (J)				<0.005				
2/9/2021	0.0017 (J)	<0.005							
2/10/2021					<0.005			<0.005	
2/11/2021									0.0078
2/12/2021						0.00086 (J)	0.0028 (J)		
3/1/2021			0.001 (J)						0.0061
3/2/2021				0.21 (O)	<0.005				
3/3/2021						<0.005	0.003 (J)	<0.005	
3/4/2021	0.0015 (J)	<0.005							
8/19/2021			0.00099 (J)		<0.005	0.00055 (J)	0.0017 (J)		0.0052
8/20/2021				0.074 (O)					
8/27/2021								<0.005	
9/1/2021		<0.005							
9/27/2021	<0.005								

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.005					
6/2/2016	<0.005						
6/8/2016					<0.005		
7/25/2016		<0.005					
7/26/2016	<0.005						
8/1/2016					<0.005		
9/2/2016						0.0006 (J)	
9/14/2016		<0.005					
9/15/2016	<0.005						
9/20/2016					<0.005		
11/1/2016	<0.005	<0.005					
11/8/2016					<0.005		
11/14/2016						<0.005	
1/11/2017	<0.005	<0.005					
1/17/2017					<0.005		
2/28/2017						<0.005	
3/1/2017		<0.005					
3/2/2017	<0.005						
3/8/2017					<0.005		
4/26/2017	<0.005	<0.005					
5/2/2017					<0.005		
5/9/2017						<0.005	
6/28/2017	<0.005	<0.005					
7/7/2017					<0.005		
7/13/2017						<0.005	
9/22/2017						<0.005	
9/29/2017						<0.005	
10/6/2017						<0.005	
10/12/2017				0.0078 (J)			
11/21/2017				0.0097 (J)			
1/11/2018				0.0131			
2/20/2018				0.0162			
3/28/2018	<0.005	<0.005					
3/30/2018					<0.005	<0.005	
4/3/2018				0.015			
6/7/2018	<0.005						
6/8/2018		<0.005					
6/12/2018					<0.005		
6/13/2018						<0.005	
6/29/2018				0.013			
8/6/2018				0.0053 (J)			
9/24/2018				0.0071 (J)			
9/26/2018					<0.005	<0.005	
10/1/2018	<0.005	<0.005					
10/16/2018			<0.005				
2/27/2019	<0.005	<0.005					
3/5/2019					<0.005		
3/6/2019						<0.005	
4/1/2019	<0.005	<0.005					
4/4/2019					<0.005	<0.005	
9/25/2019	<0.005	<0.005					
9/26/2019			<0.005		<0.005	0.00048 (J)	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
2/11/2020		<0.005					
2/12/2020	<0.005						
3/19/2020	<0.005	<0.005					
3/25/2020			0.0059			0.00038 (J)	
3/26/2020					<0.005		
9/23/2020	<0.005	<0.005			<0.005		
9/24/2020			<0.005				
9/25/2020				0.0023 (J)			
10/7/2020						0.00086 (J)	
2/9/2021				0.0023 (J)	<0.005		
2/10/2021	<0.005	<0.005	<0.005			0.00038 (J)	
3/3/2021	<0.005	<0.005			<0.005		
3/4/2021			<0.005	0.003 (J)		<0.005	
8/19/2021	<0.005						
8/25/2021				0.0068			
8/27/2021		<0.005					
9/1/2021			<0.005		<0.005		
9/3/2021						<0.005	<0.005

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						0.0804 (U)	0.301 (U)		
6/7/2016					0.158 (U)			0.0191 (U)	0.347
7/27/2016					0.0354 (U)	0.206 (U)	0.196 (U)	0.541 (U)	
7/28/2016									0.815 (U)
9/16/2016					1.04		0.915 (U)		
9/19/2016						1.58		0.826 (U)	0.862 (U)
11/2/2016								0.791 (U)	
11/3/2016					0.314 (U)	0.342 (U)	0.928 (U)		0.797 (U)
1/11/2017					0.34 (U)	0.365 (U)	0.502 (U)		
1/13/2017								0.296 (U)	0.72 (U)
3/1/2017						0.395 (U)	0.202 (U)		
3/2/2017					0.746 (U)				
3/6/2017								0.518 (U)	0.518 (U)
4/26/2017						0.507 (U)	0.264 (U)	0.282 (U)	1.13 (U)
5/2/2017					0.111 (U)				
6/28/2017						0.892	0.636 (U)		
6/29/2017					0.576 (U)			1.12	0.841 (U)
3/28/2018					0.438 (U)	0.92 (U)	0.56 (U)		
3/29/2018								1.73	1.91
6/5/2018									1.39
6/6/2018								0.694 (U)	
6/7/2018						0.668 (U)			
6/11/2018					0.901 (U)		0.649 (U)		
9/25/2018					0.68 (U)	0.141 (U)	0.574 (U)	0.772 (U)	1.62
10/16/2018	0.384 (U)								
3/5/2019					0.272 (U)		0.474 (U)	0.84 (U)	0.985 (U)
3/6/2019						0.714 (U)			
4/2/2019					0.847 (U)				1.42
4/3/2019						0.385 (U)	0.429 (U)	1.01	
9/24/2019									1.35
9/25/2019					0.412 (U)			1.18 (U)	
9/26/2019						0.386 (U)	0.222 (U)		
2/11/2020					0.461 (U)	1.48	0.597 (U)		
2/12/2020								1.11 (U)	1.61
3/24/2020					0.534 (U)	0.632 (U)	0.262 (U)	1.88	1.24 (U)
3/25/2020	0.525 (U)								
9/23/2020		0.0813 (U)	1.2 (U)		0.466 (U)	0.887 (U)	0.43 (U)		
9/24/2020	0.547 (U)			0.668 (U)				0.611 (U)	1.8
2/9/2021	0.866 (U)	0.492 (U)	0.659 (U)	1.07 (U)	0.529 (U)	0.314 (U)	0.259 (U)	0.284 (U)	1.24
3/3/2021	0.377 (U)	0.563 (U)	1.07		0.59 (U)	0.565 (U)	0.352 (U)	0.133 (U)	1.2
3/4/2021				1.46					
8/25/2021			0.0991 (U)						
8/26/2021				0.724 (U)			0.686 (U)		
8/27/2021					0.9 (U)	0.761 (U)		0.779 (U)	
9/1/2021	0.676 (U)	0.761 (U)							1.86

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			0.721	5.11	0.614				
6/7/2016						0.303 (U)			
7/26/2016			1.26	6.92	1.47				
7/28/2016						0.386 (U)			
8/30/2016									2.99
9/14/2016			0.901 (U)	3.96	1.27				
9/20/2016						1.47			
11/2/2016			1.09 (U)	4.53					
11/4/2016					0.434 (U)				
11/8/2016						0.22 (U)			
11/16/2016									4.01
1/12/2017				4.43	0.202 (U)				
1/13/2017			1.19						
1/16/2017						0.147 (U)			
2/27/2017									2.5
3/6/2017			0.669 (U)						
3/7/2017				4.8	0.0674 (U)				
3/9/2017						0.0892 (U)			
5/1/2017			0.803 (U)	4.16					
5/2/2017					0.444 (U)	0.149 (U)			
5/10/2017									2.55
6/27/2017				2.8	0.77 (U)				
6/29/2017			1.35						
7/10/2017						0.815 (U)			
7/11/2017									3.94
10/11/2017	0.586 (U)								
10/12/2017		1.49					1.24	0.641 (U)	3.57
11/20/2017	0.816 (U)	0.918 (U)					0.342 (U)		
11/21/2017								2.01	
1/10/2018		1.05							
1/11/2018	0.841 (U)							0.919 (U)	
1/12/2018							1.04		
2/19/2018		2.05						1.82	
2/20/2018	1.58						1.6 (U)		
3/29/2018			0.703 (U)	3.42	0.648 (U)				
3/30/2018						0.659 (U)			
4/3/2018	0.385 (U)	0.68 (U)					0.726 (U)	0.911 (U)	
4/4/2018									1.9
6/6/2018				3.99					
6/7/2018			0.628 (U)		0.745 (U)				
6/12/2018						1.03 (U)			
6/27/2018								0.429 (U)	
6/28/2018	0.283 (U)	1.28					1.06 (U)		
8/7/2018	0.332 (U)	1.16					1.21	0.579 (U)	
9/20/2018									1.94
9/24/2018	0.767 (U)	0.965 (U)					1.52	1.39	
9/26/2018			0.756 (U)	2.73	0.377 (U)				
9/27/2018						1.06 (U)			
3/4/2019			1.21 (U)	4.43	1 (U)				
3/6/2019						0.736 (U)			
4/3/2019			1.07 (U)	4.79	0.43 (U)				
4/4/2019						0.474 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
8/21/2019	1.01 (U)	1.24 (U)							
8/22/2019							1.97	2.03	1.59
9/24/2019				4.06	0.699 (U)				
9/25/2019			1.86						
9/27/2019						0.684 (U)			
10/8/2019	1.02 (U)	0.866 (U)					0.751 (U)	0.609 (U)	0.995 (U)
2/12/2020	0.45 (U)	1.83	1.25	4.02	0.913 (U)				
3/24/2020		1.27 (U)		3.52					
3/25/2020	0.377 (U)		0.766 (U)				0.321 (U)	0.568 (U)	1.17 (U)
3/26/2020						0.281 (U)			
9/22/2020			0.795 (U)	2.98	0.428 (U)				
9/24/2020	0.568 (U)	0.634 (U)				0.788 (U)			0.751 (U)
9/25/2020							0.246 (U)	0.769 (U)	
2/8/2021				2.89	0.613 (U)				
2/9/2021			0.626 (U)			0.464 (U)	0.626 (U)		
2/10/2021	0.518 (U)	0.783 (U)						0.548 (U)	0.612 (U)
3/2/2021				1.67	0.579 (U)				
3/3/2021			1						
3/4/2021	0.636 (U)	0.818 (U)				0.771 (U)	0.816 (U)	1.23	1.02
8/25/2021						0.624 (U)			0.978 (U)
8/26/2021	0.674 (U)		1.17 (U)	4.68	0.798 (U)		0.427 (U)	0.356 (U)	
9/3/2021		0.971 (U)							

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						0.321 (U)	0.42		
6/2/2016					0.329 (U)				0.0652 (U)
7/25/2016							1.83		3.01
7/26/2016					1.51	0.707 (U)			
8/30/2016			1.09						
8/31/2016	0.926 (U)			1.2					
9/1/2016		1.2							
9/13/2016						1.22	0.841		
9/14/2016								0.98 (U)	
9/15/2016					1.04 (U)				
9/19/2016									0.871 (U)
11/1/2016						0.805 (U)			0.307 (U)
11/2/2016					0.496 (U)				
11/4/2016							0.166 (U)	0.277 (U)	
11/15/2016		0.645 (U)							
11/16/2016	0.773 (U)								
11/28/2016				0.264 (U)					
12/15/2016			1 (U)					0.071 (U)	
1/10/2017					0.376 (U)				
1/11/2017						0.705 (U)			
1/16/2017							0	0.44 (U)	0.284 (U)
2/21/2017									0.503 (U)
2/22/2017				1.06 (U)					
2/24/2017	0.661 (U)		0.504 (U)						
2/27/2017		0.244 (U)							
3/2/2017						0.251 (U)	0.504 (U)		
3/3/2017								0.448 (U)	
3/8/2017					0.0745 (U)				
4/26/2017					0.282 (U)				0.204 (U)
4/27/2017						1.08	0.593 (U)		
4/28/2017								0.548 (U)	
5/8/2017			0.455 (U)	0.187 (U)					
5/9/2017		0.519 (U)							
5/10/2017	1.27								
5/26/2017								0 (U)	
6/27/2017						1.02 (U)	0.657 (U)		
6/28/2017								0.608 (U)	
6/30/2017					0.994				0.738 (U)
7/11/2017	1.02		0.471 (U)						
7/13/2017		0.5 (U)							
7/17/2017				1.42					
10/10/2017			0.649 (U)						
10/11/2017		1.41							
10/12/2017	1.58								
10/16/2017				1.17					
2/19/2018				1.58 (D)					
3/27/2018					0.189 (U)		0.39 (U)		0.31 (U)
3/28/2018								0.412 (U)	
3/29/2018						0.503 (U)			
4/2/2018			0.512 (U)						
4/4/2018	1.71	0.442 (U)							
6/5/2018						0.771 (U)			

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/6/2018							2.8		
6/7/2018								0.73 (U)	
6/8/2018					0.218 (U)				
6/11/2018									0.608 (U)
8/6/2018				0.196 (U)					
9/19/2018			0.789 (U)						
9/20/2018	2.8	1.14 (U)							
10/1/2018					1.24	0.783 (U)	1.06 (U)	0.756 (U)	
10/2/2018									0.97 (U)
2/26/2019					0.202 (U)				0.524 (U)
2/27/2019						1.21 (U)	0.637 (U)	0.635 (U)	
3/28/2019						1.13 (U)	0.125 (U)		
3/29/2019					0 (U)			0.224 (U)	
4/1/2019									1.02 (U)
8/19/2019				1.39					
8/20/2019			2.44						
8/21/2019	3.16								
9/24/2019						1.22 (U)	0.949 (U)	0.429 (U)	
9/25/2019					0.707 (U)				1.02 (U)
9/26/2019		1.16 (U)							
10/8/2019	3.65		1.72	1.32 (U)					
2/10/2020						1.41	1.25 (U)		
2/11/2020								0.817 (U)	
2/12/2020					1.07 (U)				0.301 (U)
3/17/2020			1.22 (U)	1 (U)					
3/18/2020					0.207 (U)		0.458 (U)		
3/19/2020						1.1		0.715 (U)	1
3/25/2020	3.04	1.2 (U)							
8/26/2020				1.75					
8/27/2020			1.26 (U)						
9/22/2020			1.06 (U)	0.688 (U)					
9/23/2020						1.35 (U)	0.00884 (U)	0.565 (U)	
9/24/2020		1.57 (U)							0.684 (U)
9/25/2020	4.75				0.603 (U)				
2/9/2021	6.38	0.137 (U)							
2/10/2021					0.353 (U)			1.04 (U)	
2/11/2021									0.678 (U)
2/12/2021						0.366 (U)	0.458 (U)		
3/1/2021			1.2						0.412 (U)
3/2/2021				0.948 (U)	0.71 (U)				
3/3/2021						0.492 (U)	0.105 (U)	0.459 (U)	
3/4/2021	6.02	0.579 (U)							
8/19/2021			1.07 (U)		0.786 (U)	1.17 (U)	0.0732 (U)		0.234 (U)
8/20/2021				0.528 (U)					
8/27/2021								0.409 (U)	
9/1/2021		0.686 (U)							
9/27/2021	1.54								

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D	PZ-52D
6/1/2016		0.896						
6/2/2016	2.51							
6/8/2016					1.06			
7/25/2016		2.28						
7/26/2016	3.82							
8/1/2016					0.467 (U)			
9/2/2016						0.873 (U)		
9/14/2016		0.821 (U)						
9/15/2016	4.24							
9/20/2016					0.853 (U)			
9/22/2016						0.667 (U)		
9/29/2016						1.63		
10/6/2016						0.641 (U)		
11/1/2016	3.92	0.585 (U)						
11/8/2016					0.433 (U)			
11/14/2016						0.0451 (U)		
1/11/2017	2.52	1.22						
1/17/2017					0.0759 (U)			
2/28/2017						1.34 (U)		
3/1/2017		0.877 (U)						
3/2/2017	3.13							
3/8/2017					0.479 (U)			
4/26/2017	2.35	0.672 (U)						
5/2/2017					0.506 (U)			
5/9/2017						0.309 (U)		
6/28/2017	2.6	1.07 (U)						
7/7/2017					0.713 (U)			
7/13/2017						0.618 (U)		
10/12/2017				1.83				
11/21/2017				1.33				
1/11/2018				1.53				
2/20/2018				2.75				
3/28/2018	3	0.65 (U)						
3/30/2018					0.409 (U)	0.721 (U)		
4/3/2018				1.47				
6/7/2018	2.79							
6/8/2018		1.89						
6/12/2018					0.728 (U)			
6/13/2018						1.04 (U)		
6/29/2018				1.69				
8/6/2018				1.69				
9/24/2018				2.26				
9/26/2018					0.981	0.604 (U)		
10/1/2018	3.14	1.58						
10/16/2018			0.363 (U)					
2/27/2019	3.79	3.67						
3/5/2019					0.837 (U)			
3/6/2019						0.919 (U)		
4/1/2019	4.33	2.28						
4/4/2019						1.05 (U)		
4/9/2019					0.502 (U)			
9/25/2019	4.2	1.6						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D	PZ-52D
9/26/2019					0.964 (U)	0.979 (U)		
2/11/2020	3.87	1.85						
3/19/2020	3.96	2.2						
3/25/2020			0.197 (U)			1.22 (U)		
3/26/2020					0.511 (U)			
9/23/2020	4.14	1.14 (U)			0.786 (U)			
9/24/2020			1.07 (U)					
9/25/2020				1.68 (U)				
10/7/2020						1.58		
2/9/2021				1.52	0.678 (U)			
2/10/2021	3.65	2.46	0.546 (U)			0.466 (U)		
3/3/2021	3.58	2.03			0.415 (U)			
3/4/2021			0.397 (U)	1.49		0.0671 (U)		
8/19/2021	3.53							
8/25/2021				1.41				
8/27/2021		1.34						
9/1/2021			0.696 (U)		0.444 (U)			
9/3/2021						0.622 (U)	3.18	
11/4/2021								0.721 (U)

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.1	<0.1		
6/7/2016					<0.1			<0.1	<0.1
7/27/2016					<0.1	<0.1	<0.1	<0.1	
7/28/2016									0.02 (J)
9/16/2016					<0.1		<0.1		
9/19/2016						<0.1		<0.1	0.02 (J)
11/2/2016								<0.1	
11/3/2016					<0.1	<0.1	<0.1		<0.1
1/11/2017					<0.1	<0.1	<0.1		
1/13/2017								<0.1	<0.1
3/1/2017						<0.1	<0.1		
3/2/2017					<0.1				
3/6/2017								<0.1	<0.1
4/26/2017						<0.1	<0.1	<0.1	0.04 (J)
5/2/2017					<0.1				
6/28/2017						<0.1	<0.1		
6/29/2017					<0.1			<0.1	<0.1
10/3/2017									<0.1
10/4/2017					<0.1		<0.1	<0.1	
10/5/2017						<0.1			
3/28/2018					<0.1	<0.1	<0.1		
3/29/2018								<0.1	<0.1
6/5/2018									0.13 (J)
6/6/2018								<0.1	
6/7/2018						<0.1			
6/11/2018					<0.1		<0.1		
9/25/2018					<0.1	<0.1	<0.1	<0.1	0 (J)
10/16/2018	<0.1								
3/5/2019					<0.1		<0.1	<0.1	0.32
3/6/2019						<0.1			
4/2/2019					<0.1				0.12 (J)
4/3/2019						<0.1	<0.1	<0.1	
9/24/2019									0.15 (J)
9/25/2019					<0.1			<0.1	
9/26/2019	<0.1					<0.1	<0.1		
2/11/2020					<0.1	<0.1	<0.1		
2/12/2020								<0.1	0.1 (J)
3/24/2020					<0.1	<0.1	<0.1	<0.1	0.081 (J)
3/25/2020	<0.1								
9/23/2020		<0.1	<0.1		<0.1	<0.1	<0.1		
9/24/2020	<0.1			<0.1				<0.1	0.079 (J)
2/9/2021	<0.1	<0.1	0.14	<0.1		<0.1	<0.1	<0.1	0.092 (J)
3/3/2021	<0.1	<0.1	0.14		<0.1	<0.1	<0.1	<0.1	
3/4/2021				<0.1					0.091 (J)
8/25/2021			<0.1						
8/26/2021				<0.1			<0.1		
8/27/2021					<0.1	<0.1		<0.1	
9/1/2021	<0.1	<0.1							0.11

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.1	0.11 (J)	<0.1				
6/7/2016						<0.1			
7/26/2016			<0.1	0.05 (J)	<0.1				
7/28/2016						0.03 (J)			
8/30/2016									0.02 (J)
9/14/2016			<0.1	0.04 (J)	<0.1				
9/20/2016						<0.1			
11/2/2016			<0.1	<0.1					
11/4/2016					<0.1				
11/8/2016						<0.1			
11/16/2016									0.07 (J)
1/12/2017				0.04 (J)	<0.1				
1/13/2017			<0.1						
1/16/2017						<0.1			
2/27/2017									0.06 (J)
3/6/2017			<0.1						
3/7/2017				<0.1	<0.1				
3/9/2017						<0.1			
5/1/2017			<0.1	<0.1					
5/2/2017					<0.1	<0.1			
5/10/2017									<0.1
6/27/2017				<0.1	<0.1				
6/29/2017			<0.1						
7/10/2017						<0.1			
7/11/2017									<0.1
10/3/2017				<0.1	<0.1				
10/5/2017			<0.1						
10/11/2017	<0.1					<0.1			
10/12/2017		<0.1					<0.1	<0.1	<0.1
11/20/2017	<0.1	<0.1					0.2 (J)		
11/21/2017								<0.1	
1/10/2018		<0.1							
1/11/2018	<0.1							<0.1	
1/12/2018							0.21 (J)		
2/19/2018		<0.1						<0.1	
2/20/2018	0.23						<0.1		
3/29/2018			<0.1	<0.1	<0.1				
3/30/2018						<0.1			
4/3/2018	<0.1	<0.1					0.41	<0.1	
4/4/2018									<0.1
6/6/2018				0.15 (J)					
6/7/2018			<0.1		<0.1				
6/12/2018						<0.1			
6/27/2018								<0.1	
6/28/2018	<0.1	<0.1					0.43		
8/7/2018	0.048 (J)	<0.1					<0.1	0.11 (J)	
9/20/2018									0.041 (J)
9/24/2018	<0.1	<0.1					0.034 (J)	<0.1	
9/26/2018			<0.1	<0.1	<0.1				
9/27/2018						<0.1			
3/4/2019			<0.1	0.19 (J)	<0.1				
3/6/2019						<0.1			

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
3/26/2019		<0.1							
3/27/2019	<0.1						0.24 (J)		<0.1
3/28/2019								0.1 (J)	
4/3/2019			<0.1	0.047 (J)	<0.1				
4/4/2019						0.049 (J)			
8/21/2019	<0.1	<0.1							
8/22/2019							<0.1	<0.1	<0.1
9/24/2019				0.05 (J)	<0.1				
9/25/2019			<0.1						
9/27/2019						0.12 (J)			
10/9/2019	<0.1	<0.1					<0.1	<0.1	<0.1
2/12/2020	<0.1	<0.1	<0.1	<0.1	<0.1				
3/24/2020		<0.1		<0.1	<0.1				
3/25/2020	<0.1		<0.1				<0.1	<0.1	<0.1
3/26/2020						<0.1			
9/22/2020			<0.1	0.056 (J)	<0.1				
9/24/2020	<0.1	<0.1				<0.1			<0.1
9/25/2020							<0.1	<0.1	
2/8/2021				0.055 (J)	<0.1				
2/9/2021			<0.1			<0.1	<0.1		
2/10/2021	<0.1	<0.1						<0.1	<0.1
3/2/2021				<0.1	<0.1				
3/3/2021			<0.1						
3/4/2021	<0.1	<0.1				<0.1	<0.1	<0.1	<0.1
8/25/2021						<0.1			<0.1
8/26/2021	0.063 (J)		<0.1	0.061 (J)	<0.1		<0.1	<0.1	
9/3/2021		<0.1							

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						0.12 (J)	<0.1		
6/2/2016					<0.1				<0.1
7/25/2016							0.06 (J)		0.06 (J)
7/26/2016					0.02 (J)	0.08 (J)			
8/30/2016			0.09 (J)						
8/31/2016	0.12 (J)			0.14 (J)					
9/1/2016		0.09 (J)							
9/13/2016						0.11 (J)	<0.1		
9/14/2016								0.08 (J)	
9/15/2016					<0.1				
9/19/2016									<0.1
11/1/2016						<0.1			<0.1
11/2/2016					<0.1				
11/4/2016							<0.1	<0.1	
11/14/2016			0.18 (J)						
11/15/2016		0.16 (J)							
11/16/2016	0.2 (J)								
11/28/2016				0.12 (J)					
12/15/2016								0.06 (J)	
1/10/2017					<0.1				
1/11/2017						0.05 (J)			
1/16/2017							<0.1	0.1 (J)	<0.1
2/21/2017									<0.1
2/22/2017				0.09 (J)					
2/24/2017	0.21 (J)		0.05 (J)						
2/27/2017		0.06 (J)							
3/2/2017						<0.1	<0.1		
3/3/2017								<0.1	
3/8/2017					<0.1				
4/26/2017					<0.1				<0.1
4/27/2017						0.04 (J)	0.01 (J)		
4/28/2017								0.06 (J)	
5/8/2017			0.03 (J)	0.05 (J)					
5/9/2017		0.05 (J)							
5/10/2017	0.04 (J)								
5/26/2017								0.09 (J)	
6/27/2017						<0.1	<0.1		
6/28/2017								0.11 (J)	
6/30/2017					<0.1				<0.1
7/11/2017	0.2 (J)		0.07 (J)						
7/13/2017		<0.1							
7/17/2017				0.14 (J)					
10/3/2017						<0.1	<0.1	<0.1	
10/4/2017									<0.1
10/5/2017					<0.1				
10/10/2017			<0.1						
10/11/2017		0.14 (J)							
10/12/2017	0.1 (J)								
10/16/2017				0.12 (J)					
2/19/2018				0.17					
3/27/2018					<0.1		<0.1		<0.1
3/28/2018								0.31	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
3/29/2018						<0.1			
4/2/2018			<0.1						
4/4/2018	<0.1	<0.1							
6/5/2018						0.055 (J)			
6/6/2018							<0.1		
6/7/2018								0.11 (J)	
6/8/2018					<0.1				
6/11/2018									<0.1
8/6/2018				0.087 (J)					
9/19/2018			<0.1						
9/20/2018	<0.1	<0.1							
10/1/2018					<0.1	<0.1	<0.1	<0.1	
10/2/2018									<0.1
2/25/2019				0.14 (J)					
2/26/2019					<0.1				<0.1
2/27/2019						0.052 (J)	<0.1	0.12 (J)	
3/27/2019			0.081 (J)						
3/28/2019	0.078 (J)	<0.1				0.036 (J)	<0.1		
3/29/2019					<0.1			0.13 (J)	
4/1/2019									<0.1
6/12/2019				0.12 (J)					
8/19/2019				<0.1					
8/20/2019			<0.1						
8/21/2019	0.062 (J)								
9/24/2019						0.063 (J)	<0.1	0.081 (J)	
9/25/2019					<0.1				<0.1
9/26/2019		0.09 (J)							
10/8/2019			0.034 (J)	0.052 (J)					
10/9/2019	<0.1								
2/10/2020						0.061 (J)	<0.1		
2/11/2020								0.075 (J)	
2/12/2020					<0.1				<0.1
3/17/2020			<0.1	0.053 (J)					
3/18/2020					<0.1		<0.1		
3/19/2020						0.064 (J)		0.093 (J)	<0.1
3/25/2020	0.073 (J)	<0.1							
8/26/2020				0.068 (J)					
8/27/2020			<0.1						
9/22/2020			<0.1	0.058 (J)					
9/23/2020						0.058 (J)	<0.1	0.08 (J)	
9/24/2020		<0.1							<0.1
9/25/2020	<0.1				<0.1				
2/9/2021	0.058 (J)	<0.1							
2/10/2021					<0.1			0.094 (J)	
2/11/2021									<0.1
2/12/2021						0.068 (J)	<0.1		
3/1/2021			<0.1						<0.1
3/2/2021				0.073 (J)	<0.1				
3/3/2021						0.078 (J)	<0.1	0.085 (J)	
3/4/2021	0.063 (J)	<0.1							
8/19/2021			<0.1		<0.1	0.074 (J)	<0.1		<0.1
8/20/2021				0.06 (J)					

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
8/27/2021								0.12	
9/1/2021		<0.1							
9/27/2021	0.1								

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		0.15 (J)					
6/2/2016	0.62						
6/8/2016					<0.1		
7/25/2016		0.14 (J)					
7/26/2016	0.49						
8/1/2016					<0.1		
9/2/2016						0.05 (J)	
9/14/2016		0.18 (J)					
9/15/2016	0.54						
9/20/2016					<0.1		
11/1/2016	0.68	<0.1					
11/8/2016					<0.1		
11/14/2016						0.18 (J)	
1/11/2017	0.49	0.09 (J)					
1/17/2017					<0.1		
2/28/2017						0.09 (J)	
3/1/2017		<0.1					
3/2/2017	0.48						
3/8/2017					<0.1		
4/26/2017	0.48	0.08 (J)					
5/2/2017					<0.1		
5/9/2017						0.009 (J)	
6/28/2017	0.47	0.12 (J)					
7/7/2017					<0.1		
7/13/2017						<0.1	
9/22/2017						0.09 (J)	
9/29/2017						<0.1	
10/4/2017	<0.1	<0.1					
10/5/2017					<0.1		
10/6/2017						<0.1	
10/11/2017						<0.1	
10/12/2017				<0.1			
11/21/2017				0.26 (J)			
1/11/2018				<0.1			
2/20/2018				0.45			
3/28/2018	0.56	<0.1					
3/30/2018					<0.1	<0.1	
4/3/2018				0.31			
6/7/2018	0.48						
6/8/2018		0.2 (J)					
6/12/2018					<0.1		
6/13/2018						<0.1	
6/29/2018				<0.1			
8/6/2018				0.23 (J)			
9/24/2018				<0.1			
9/26/2018					<0.1	<0.1	
10/1/2018	0.44	<0.1					
10/16/2018			<0.1				
2/27/2019	0.53	0.13 (J)					
3/5/2019					<0.1		
3/6/2019						<0.1	
4/1/2019	0.45	0.1 (J)					

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
4/4/2019					0.033 (J)	0.043 (J)	
9/25/2019	0.46	0.1 (J)					
9/26/2019			<0.1		0.098 (J)	0.094 (J)	
2/11/2020		0.094 (J)					
2/12/2020	0.4						
3/19/2020	0.51	0.11 (J)					
3/25/2020			<0.1			<0.1	
3/26/2020					<0.1		
9/23/2020	0.47	0.098 (J)			<0.1		
9/24/2020			<0.1				
9/25/2020				<0.1			
10/7/2020						<0.1	
2/9/2021				<0.1	<0.1		
2/10/2021	0.43	<0.1	<0.1			<0.1	
3/3/2021	0.44	0.1			<0.1		
3/4/2021			<0.1	<0.1		<0.1	
8/19/2021	0.47						
8/25/2021				<0.1			
8/27/2021		0.12					
9/1/2021			<0.1		<0.1		
9/3/2021						<0.1	0.15

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.001	<0.001		
6/7/2016					<0.001			<0.001	<0.001
7/27/2016					<0.001	<0.001	<0.001	<0.001	
7/28/2016									<0.001
9/16/2016					<0.001		<0.001		
9/19/2016						<0.001		<0.001	<0.001
11/2/2016								0.0013 (J)	
11/3/2016					<0.001	<0.001	<0.001		<0.001
1/11/2017					<0.001	<0.001	<0.001		
1/13/2017								<0.001	<0.001
3/1/2017						<0.001	<0.001		
3/2/2017					8E-05 (J)				
3/6/2017								<0.001	<0.001
4/26/2017						<0.001	<0.001	<0.001	<0.001
5/2/2017					<0.001				
6/28/2017						<0.001	0.0001 (J)		
6/29/2017					8E-05 (J)			<0.001	<0.001
3/28/2018					<0.001	<0.001	<0.001		
3/29/2018								<0.001	<0.001
3/5/2019					<0.001		<0.001	<0.001	<0.001
3/6/2019						<0.001			
4/2/2019					<0.001				<0.001
4/3/2019						<0.001	<0.001	<0.001	
9/24/2019									<0.001
9/25/2019					<0.001			<0.001	
9/26/2019	<0.001					<0.001	<0.001		
2/11/2020					<0.001	<0.001	<0.001		
2/12/2020								<0.001	<0.001
3/24/2020					6.4E-05 (J)	7.1E-05 (J)	5.4E-05 (J)	0.00011 (J)	<0.001
3/25/2020	<0.001								
9/23/2020		<0.001	0.00028 (J)		4.1E-05 (J)	6E-05 (J)	9.7E-05 (J)		
9/24/2020	<0.001			0.00011 (J)				9.2E-05 (J)	4.6E-05 (J)
2/9/2021	0.00019 (J)	0.00011 (J)	0.00054 (J)	7.3E-05 (J)		5E-05 (J)	9.4E-05 (J)	6.3E-05 (J)	<0.001
3/3/2021	<0.001	8E-05 (J)	9.6E-05 (J)		<0.001	<0.001	7.6E-05 (J)	4.5E-05 (J)	
3/4/2021				4.1E-05 (J)					<0.001
8/25/2021			<0.001						
8/26/2021				<0.001			<0.001		
8/27/2021					<0.001	<0.001		<0.001	
9/1/2021	<0.001	<0.001							<0.001

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.001	<0.001	<0.001				
6/7/2016						0.00044 (J)			
7/26/2016			<0.001	<0.001	<0.001				
7/28/2016						<0.001			
8/30/2016									<0.001
9/14/2016			<0.001	<0.001	<0.001				
9/20/2016						<0.001			
11/2/2016			<0.001	<0.001					
11/4/2016					<0.001				
11/8/2016						<0.001			
11/16/2016									0.0002 (J)
1/12/2017				<0.001	<0.001				
1/13/2017			<0.001						
1/16/2017						<0.001			
2/27/2017									<0.001
3/6/2017			<0.001						
3/7/2017				0.0001 (J)	7E-05 (J)				
3/9/2017						<0.001			
5/1/2017			<0.001	<0.001					
5/2/2017					<0.001	<0.001			
5/10/2017									9E-05 (J)
6/27/2017				<0.001	<0.001				
6/29/2017			<0.001						
7/10/2017						<0.001			
7/11/2017									<0.001
10/11/2017	0.0001 (J)								
10/12/2017		9E-05 (J)					0.0001 (J)	<0.001	<0.001
11/20/2017	<0.001	<0.001					0.0001 (J)		
11/21/2017								<0.001	
1/10/2018		<0.001							
1/11/2018	0.0002 (J)							7E-05 (J)	
1/12/2018							0.0001 (J)		
2/19/2018		<0.001						<0.001	
2/20/2018	<0.001						<0.001		
3/29/2018			<0.001	<0.001	<0.001				
3/30/2018						<0.001			
4/3/2018	<0.001	<0.001					<0.001	<0.001	
4/4/2018									<0.001
6/27/2018								0.0011 (J)	
6/28/2018	<0.001	<0.001					<0.001		
8/7/2018	<0.001	<0.001					<0.001	<0.001	
9/20/2018									<0.001
9/24/2018	<0.001	<0.001					<0.001	<0.001	
3/4/2019			<0.001	<0.001	<0.001				
3/6/2019						<0.001			
4/3/2019			<0.001	<0.001	<0.001				
4/4/2019						<0.001			
8/21/2019	<0.001	<0.001							
8/22/2019							<0.001	6.7E-05 (J)	<0.001
9/24/2019				<0.001	9E-05 (J)				
9/25/2019			<0.001						
9/27/2019						0.00013 (J)			

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
10/9/2019	<0.001	<0.001					<0.001	0.00012 (J)	<0.001
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001				
3/24/2020		<0.001		5.4E-05 (J)	6.8E-05 (J)				
3/25/2020	5.1E-05 (J)		<0.001				<0.001	<0.001	4.7E-05 (J)
3/26/2020						<0.001			
9/22/2020			<0.001	4.5E-05 (J)	4.2E-05 (J)				
9/24/2020	<0.001	3.8E-05 (J)				4.6E-05 (J)			<0.001
9/25/2020							<0.001	<0.001	
2/8/2021				0.00013 (J)	3.7E-05 (J)				
2/9/2021			<0.001			<0.001	<0.001		
2/10/2021	<0.001	<0.001						0.0002 (J)	5.4E-05 (J)
3/2/2021				5.1E-05 (J)	9.2E-05 (J)				
3/3/2021			<0.001						
3/4/2021	<0.001	<0.001				0.00021 (J)	<0.001	<0.001	<0.001
8/25/2021						<0.001			<0.001
8/26/2021	<0.001		<0.001	<0.001	<0.001		<0.001	<0.001	
9/3/2021		<0.001							

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.001
7/26/2016					<0.001	<0.001			
8/30/2016			<0.001						
8/31/2016	<0.001			<0.001					
9/1/2016		<0.001							
9/13/2016						0.0001 (J)	<0.001		
9/14/2016								<0.001	
9/15/2016					<0.001				
9/19/2016									<0.001
11/1/2016						<0.001			<0.001
11/2/2016					<0.001				
11/4/2016							<0.001	<0.001	
11/14/2016			<0.001						
11/15/2016		<0.001							
11/16/2016	<0.001								
11/28/2016				<0.001					
12/15/2016								<0.001	
1/10/2017					<0.001				
1/11/2017						<0.001			
1/16/2017							<0.001	<0.001	<0.001
2/21/2017									<0.001
2/22/2017				<0.001					
2/24/2017	<0.001		<0.001						
2/27/2017		<0.001							
3/2/2017						0.0001 (J)	<0.001		
3/3/2017								<0.001	
3/8/2017					0.0001 (J)				
4/26/2017					<0.001				<0.001
4/27/2017						<0.001	<0.001		
4/28/2017								<0.001	
5/8/2017			<0.001	<0.001					

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.001							
5/10/2017	8E-05 (J)								
5/26/2017								<0.001	
6/27/2017						<0.001	<0.001		
6/28/2017								<0.001	
6/30/2017					<0.001				<0.001
7/11/2017	<0.001		<0.001						
7/13/2017		<0.001							
7/17/2017				<0.001					
10/10/2017			<0.001						
10/11/2017		<0.001							
10/12/2017	<0.001								
10/16/2017				<0.001					
2/19/2018				<0.001					
3/27/2018					<0.001		<0.001		<0.001
3/28/2018								<0.001	
3/29/2018						<0.001			
4/2/2018			<0.001						
4/4/2018	<0.001	<0.001							
8/6/2018				<0.001					
9/19/2018			<0.001						
9/20/2018	<0.001	<0.001							
2/25/2019				<0.001					
2/26/2019					<0.001				<0.001
2/27/2019						<0.001	<0.001	<0.001	
6/12/2019				<0.001					
8/19/2019				<0.001					
8/20/2019			<0.001						
8/21/2019	<0.001								
9/26/2019		<0.001							
10/8/2019				<0.001					
10/9/2019	<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	<0.001
3/25/2020	7.5E-05 (J)	5.9E-05 (J)							
8/26/2020				<0.001					
8/27/2020			<0.001						
9/22/2020			<0.001	0.0001 (J)					
9/23/2020						<0.001	0.00021 (J)	0.0011 (J)	
9/24/2020		<0.001							<0.001
9/25/2020	<0.001				<0.001				
2/9/2021	<0.001	<0.001							
2/10/2021					4.8E-05 (J)			0.00015 (J)	
2/11/2021									4.6E-05 (J)
2/12/2021						4.4E-05 (J)	0.00038 (J)		
3/1/2021			<0.001						<0.001
3/2/2021				<0.001	<0.001				
3/3/2021						5.6E-05 (J)	<0.001	<0.001	

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
3/4/2021	<0.001	<0.001							
8/19/2021			<0.001		<0.001	<0.001	<0.001		<0.001
8/20/2021				<0.001					
8/27/2021								<0.001	
9/1/2021		<0.001							
9/27/2021	<0.001								

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.001					
6/2/2016	0.00056 (J)						
6/8/2016					<0.001		
7/25/2016		<0.001					
7/26/2016	0.0001 (J)						
8/1/2016					<0.001		
9/2/2016						0.0017 (J)	
9/14/2016		<0.001					
9/15/2016	0.0002 (J)						
9/20/2016					<0.001		
11/1/2016	<0.001	<0.001					
11/8/2016					<0.001		
11/14/2016						0.0002 (J)	
1/11/2017	<0.001	<0.001					
1/17/2017					<0.001		
2/28/2017						0.0003 (J)	
3/1/2017		<0.001					
3/2/2017	0.0002 (J)						
3/8/2017					<0.001		
4/26/2017	<0.001	<0.001					
5/2/2017					<0.001		
5/9/2017						0.0004 (J)	
6/28/2017	<0.001	<0.001					
7/7/2017					<0.001		
7/13/2017						0.0004 (J)	
9/22/2017						0.0003 (J)	
9/29/2017						0.0002 (J)	
10/6/2017						0.0002 (J)	
10/12/2017				0.0002 (J)			
11/21/2017				0.0002 (J)			
1/11/2018				0.0001 (J)			
2/20/2018				<0.001			
3/28/2018	<0.001	<0.001					
3/30/2018					<0.001	<0.001	
4/3/2018				<0.001			
6/29/2018				<0.001			
8/6/2018				<0.001			
9/24/2018				<0.001			
2/27/2019	<0.001	<0.001					
3/5/2019					<0.001		
3/6/2019						<0.001	
4/4/2019					<0.001	0.00037 (J)	
9/26/2019			<0.001		<0.001	0.00023 (J)	
2/11/2020		<0.001					
2/12/2020	<0.001						
3/19/2020	0.00017 (J)	<0.001					
3/25/2020			<0.001			0.0001 (J)	
3/26/2020					5.3E-05 (J)		
9/23/2020	<0.001	0.00015 (J)			<0.001		
9/24/2020			<0.001				
9/25/2020				8.5E-05 (J)			
10/7/2020						0.00077 (J)	

Time Series

Constituent: Lead (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
2/9/2021				8.8E-05 (J)	0.00036 (J)		
2/10/2021	<0.001	<0.001	8.7E-05 (J)			0.00051 (J)	
3/3/2021	<0.001	<0.001			<0.001		
3/4/2021			0.00015 (J)	<0.001		0.00025 (J)	
8/19/2021	<0.001						
8/25/2021				<0.001			
8/27/2021		<0.001					
9/1/2021			<0.001		<0.001		
9/3/2021						<0.001	<0.001

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-3	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)
6/6/2016							0.0088	0.015	
6/7/2016						<0.03			<0.03
7/27/2016						<0.03	0.0087 (J)	0.0049 (J)	<0.03
9/16/2016						<0.03		0.0031 (J)	
9/19/2016							0.0043 (J)		<0.03
11/2/2016									<0.03
11/3/2016						<0.03	<0.03	0.0021 (J)	
1/11/2017						0.0035 (J)	0.0052 (J)	0.0025 (J)	
1/13/2017									<0.03
3/1/2017							0.0053 (J)	0.0029 (J)	
3/2/2017						<0.03			
3/6/2017									<0.03
4/26/2017							0.0041 (J)	0.0019 (J)	<0.03
5/2/2017						<0.03			
6/28/2017							0.0039 (J)	0.0016 (J)	
6/29/2017						<0.03			<0.03
3/28/2018						<0.03	0.0041 (J)	0.0024 (J)	
3/29/2018									<0.03
6/6/2018									<0.03
6/7/2018							0.0032 (J)		
6/11/2018						<0.03		0.0014 (J)	
9/25/2018						<0.03	0.0036 (J)	0.0016 (J)	<0.03
10/16/2018	0.0052 (J)								
3/5/2019						<0.03		0.0031 (J)	<0.03
3/6/2019							0.0033 (J)		
4/2/2019						<0.03			
4/3/2019							0.0035 (J)	0.0028 (J)	<0.03
9/25/2019						<0.03			<0.03
9/26/2019	<0.03						0.0032 (J)	0.0029 (J)	
2/11/2020						<0.03	0.0033 (J)	0.005 (J)	
2/12/2020									<0.03
3/24/2020						0.0034 (J)	0.0033 (J)	0.0035 (J)	<0.03
3/25/2020	0.0011 (J)								
9/23/2020		<0.03		0.03 (J)		<0.03	0.003 (J)	0.0022 (J)	
9/24/2020	0.011 (J)				0.013 (J)				<0.03
2/9/2021	0.021 (J)	<0.03		0.018 (J)	0.016 (J)		0.0031 (J)	0.0019 (J)	<0.03
3/3/2021	0.022 (J)	<0.03		0.02 (J)		<0.03	0.0034 (J)	0.0021 (J)	<0.03
3/4/2021					0.016 (J)				
8/25/2021				0.033					
8/26/2021					0.015 (J)			0.0019 (J)	
8/27/2021						<0.03	0.0032 (J)		<0.03
9/1/2021	0.013 (J)	<0.03							
12/9/2021			0.042						

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
6/2/2016				0.013	0.0049 (J)	<0.03			
6/7/2016	0.0055						<0.03		
7/26/2016				0.0123 (J)	0.0063 (J)	0.0027 (J)			
7/28/2016	0.0045 (J)						0.0019 (J)		
9/14/2016				0.0137 (J)	0.0058 (J)	0.0029 (J)			
9/19/2016	0.0054 (J)								
9/20/2016							0.0021 (J)		
11/2/2016				0.0136 (J)	0.0053 (J)				
11/3/2016	<0.03								
11/4/2016						<0.03			
11/8/2016							0.0024 (J)		
1/12/2017					0.0054 (J)	0.0032 (J)			
1/13/2017	0.0062 (J)			0.0121 (J)					
1/16/2017							0.0022 (J)		
3/6/2017	0.0059 (J)			0.0143 (J)					
3/7/2017					0.0056 (J)	0.0035 (J)			
3/9/2017							0.0025 (J)		
4/26/2017	0.0054 (J)								
5/1/2017				0.0132 (J)	0.0031 (J)				
5/2/2017						0.0031 (J)	0.0019 (J)		
6/27/2017					0.0018 (J)	0.0029 (J)			
6/29/2017	0.0047 (J)			0.0145 (J)					
7/10/2017							0.0018 (J)		
10/11/2017		0.0018 (J)							
10/12/2017			<0.03					0.0095 (J)	0.004 (J)
11/20/2017		0.0018 (J)	<0.03					0.0083 (J)	
11/21/2017									0.0043 (J)
1/10/2018			<0.03						
1/11/2018		0.0019 (J)							0.0044 (J)
1/12/2018								0.0089 (J)	
2/19/2018			<0.03						<0.03
2/20/2018		<0.03						0.0082 (J)	
3/29/2018	0.0062 (J)			0.014 (J)	0.0058 (J)	0.0034 (J)			
3/30/2018							0.0039 (J)		
4/3/2018		0.0022 (J)	<0.03					0.0097 (J)	0.0047 (J)
6/5/2018	0.0061 (J)								
6/6/2018					0.0068 (J)				
6/7/2018				0.013 (J)		0.0032 (J)			
6/12/2018							0.0017 (J)		
6/27/2018									0.0042 (J)
6/28/2018		0.0026 (J)	<0.03					0.0093 (J)	
8/7/2018		0.0024 (J)	<0.03					0.0092 (J)	0.0038 (J)
9/24/2018		0.0022 (J)	<0.03					0.0083 (J)	0.0037 (J)
9/25/2018	0.0062 (J)								
9/26/2018				0.014 (J)	0.0065 (J)	0.0032 (J)			
9/27/2018							0.0017 (J)		
3/4/2019				0.015 (J)	0.0065 (J)	0.0032 (J)			
3/5/2019	0.0053 (J)								
3/6/2019							0.0025 (J)		
4/2/2019	0.0051 (J)								
4/3/2019				0.014 (J)	0.007 (J)	0.0035 (J)			
4/4/2019							0.0018 (J)		

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
8/21/2019		0.0035 (J)	<0.03						
8/22/2019								0.0082 (J)	0.0035 (J)
9/24/2019	0.0068 (J)				0.0065 (J)	0.0031 (J)			
9/25/2019				0.014 (J)					
9/27/2019							0.0017 (J)		
10/9/2019		0.0036 (J)	<0.03					0.0081 (J)	0.0032 (J)
2/12/2020	0.0065 (J)	0.0041 (J)	<0.03	0.011 (J)	0.0066 (J)	0.0032 (J)			
3/24/2020	0.0064 (J)		<0.03		0.0064 (J)	0.0033 (J)			
3/25/2020		0.0049 (J)		0.014 (J)				0.0081 (J)	0.0029 (J)
3/26/2020							0.0021 (J)		
9/22/2020				0.013 (J)	0.0066 (J)	0.0034 (J)			
9/24/2020	0.0069 (J)	0.0054 (J)	<0.03				0.0035 (J)		
9/25/2020								0.0069 (J)	0.0025 (J)
2/8/2021					0.0063 (J)	0.0032 (J)			
2/9/2021	0.006 (J)			0.011 (J)			0.0026 (J)	0.0067 (J)	
2/10/2021		0.0071 (J)	<0.03						0.0021 (J)
3/2/2021					0.0018 (J)	0.0031 (J)			
3/3/2021				0.012 (J)					
3/4/2021	0.0062 (J)	0.0084 (J)	<0.03				0.0026 (J)	0.0067 (J)	0.0021 (J)
8/25/2021							0.0026 (J)		
8/26/2021		0.0082 (J)		0.0094 (J)	0.0075 (J)	0.0032 (J)		0.007 (J)	0.0021 (J)
9/1/2021	0.0057 (J)								
9/3/2021			<0.03						

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (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			
7/25/2016								0.002 (J)	
7/26/2016						<0.03	0.0135 (J)		
8/30/2016	0.0257 (J)			0.0061 (J)					
8/31/2016		0.006 (J)			<0.03				
9/1/2016			0.0034 (J)						
9/13/2016							0.0112 (J)	<0.03	
9/14/2016									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
11/14/2016				0.0064 (J)					
11/15/2016			0.0044 (J)						
11/16/2016	0.0221 (J)	0.0095 (J)							
11/28/2016					<0.03				
12/15/2016									0.0026 (J)
1/10/2017						<0.03			
1/11/2017							0.0166 (J)		
1/16/2017								0.0023 (J)	0.0023 (J)
2/22/2017					<0.03				
2/24/2017		0.0104 (J)		0.0049 (J)					
2/27/2017	0.0208 (J)		0.0036 (J)						
3/2/2017							0.0159 (J)	0.0025 (J)	
3/3/2017									0.0013 (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)
5/8/2017				0.0053 (J)	0.0014 (J)				
5/9/2017			0.0038 (J)						
5/10/2017	0.0316 (J)	0.0123 (J)							
5/26/2017									0.0038 (J)
6/27/2017							0.0094 (J)	0.0024 (J)	
6/28/2017									0.0026 (J)
6/30/2017						<0.03			
7/11/2017	0.0281 (J)	0.0131 (J)		0.0051 (J)					
7/13/2017			0.0036 (J)						
7/17/2017					<0.03				
10/10/2017				0.0043 (J)					
10/11/2017			0.0036 (J)						
10/12/2017	0.0331 (J)	0.013 (J)							
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							0.0078 (J)		
4/2/2018				0.0045 (J)					
4/4/2018	0.037 (J)	0.016 (J)	0.0039 (J)						
6/5/2018							0.0079 (J)		
6/6/2018								0.0024 (J)	

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
6/7/2018									0.0017 (J)
6/8/2018						<0.03			
8/6/2018					<0.03				
9/19/2018				0.0043 (J)					
9/20/2018	0.049 (J)	0.019 (J)	0.0036 (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)
3/28/2019							0.013 (J)	0.0022 (J)	
3/29/2019						<0.03			0.0016 (J)
8/19/2019					0.0019 (J)				
8/20/2019				0.0036 (J)					
8/21/2019		0.015 (J)							
8/22/2019	0.047								
9/24/2019							0.0046 (J)	0.0023 (J)	0.0011 (J)
9/25/2019						<0.03			
9/26/2019			0.0036 (J)						
10/8/2019				0.0036 (J)	0.0015 (J)				
10/9/2019	0.037	0.018 (J)							
2/10/2020							0.011 (J)	0.0023 (J)	
2/11/2020									0.0012 (J)
2/12/2020						<0.03			
3/17/2020				0.0046 (J)	0.0017 (J)				
3/18/2020						<0.03		0.0024 (J)	
3/19/2020							0.013 (J)		0.0022 (J)
3/25/2020	0.045	0.016 (J)	0.0037 (J)						
8/26/2020					0.0032 (J)				
8/27/2020				0.0039 (J)					
9/22/2020				0.0036 (J)	0.0029 (J)				
9/23/2020							0.014 (J)	0.0024 (J)	0.0016 (J)
9/24/2020	0.05		0.0037 (J)						
9/25/2020		0.018 (J)				<0.03			
2/9/2021		0.024 (J)	0.0038 (J)						
2/10/2021	0.058					<0.03			0.0039 (J)
2/12/2021							0.01 (J)	0.0025 (J)	
3/1/2021				0.0037 (J)					
3/2/2021					0.0033 (J)	<0.03			
3/3/2021							0.012 (J)	0.0025 (J)	0.0016 (J)
3/4/2021	0.059	0.025 (J)	0.0035 (J)						
8/19/2021				0.0038 (J)		<0.03	0.013 (J)	0.0023 (J)	
8/20/2021					0.0028 (J)				
8/25/2021	0.053								
8/27/2021									0.0058 (J)
9/1/2021			0.0036 (J)						
9/27/2021		0.0092 (J)							

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016			0.01					
6/2/2016	<0.03	0.018						
6/8/2016						<0.03		
7/25/2016	<0.03		0.0132 (J)					
7/26/2016		0.0221 (J)						
8/1/2016						<0.03		
9/2/2016							0.0029 (J)	
9/14/2016			0.012 (J)					
9/15/2016		0.0197 (J)						
9/19/2016	<0.03							
9/20/2016						<0.03		
11/1/2016	<0.03	0.0194 (J)	0.0115 (J)					
11/8/2016						<0.03		
11/14/2016							0.0044 (J)	
1/11/2017		0.0177 (J)	0.0085 (J)					
1/16/2017	<0.03							
1/17/2017						<0.03		
2/21/2017	<0.03							
2/28/2017							0.0038 (J)	
3/1/2017			0.0114 (J)					
3/2/2017		0.0185 (J)						
3/8/2017						<0.03		
4/26/2017	<0.03	0.0183 (J)	0.0092 (J)					
5/2/2017						<0.03		
5/9/2017							0.0057 (J)	
6/28/2017		0.0173 (J)	0.0085 (J)					
6/30/2017	<0.03							
7/7/2017						<0.03		
7/13/2017							0.007 (J)	
9/22/2017							0.0067 (J)	
9/29/2017							0.0064 (J)	
10/6/2017							0.0065 (J)	
10/12/2017					0.0271 (J)			
11/21/2017					0.0255 (J)			
1/11/2018					0.0271 (J)			
2/20/2018					<0.03			
3/27/2018	0.0011 (J)							
3/28/2018		0.02 (J)	0.013 (J)					
3/30/2018						<0.03	0.0061 (J)	
4/3/2018					0.027 (J)			
6/7/2018		0.02 (J)						
6/8/2018			0.012 (J)					
6/11/2018	0.0012 (J)							
6/12/2018						<0.03		
6/13/2018							0.0065 (J)	
6/29/2018					0.032 (J)			
8/6/2018					0.033 (J)			
9/24/2018					0.028 (J)			
9/26/2018						<0.03	0.0063 (J)	
10/1/2018		0.02 (J)	0.011 (J)					
10/2/2018	<0.03							
10/16/2018				0.0011 (J)				

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
2/26/2019	0.0011 (J)							
2/27/2019		0.021 (J)	0.014 (J)					
3/5/2019						<0.03		
3/6/2019							0.0057 (J)	
4/1/2019	0.001 (J)	0.021 (J)	0.013 (J)					
4/4/2019						<0.03	0.0058 (J)	
9/25/2019	0.0011 (J)	0.02 (J)	0.01 (J)					
9/26/2019				<0.03		<0.03	0.0041 (J)	
2/11/2020			0.013 (J)					
2/12/2020	0.0013 (J)	0.019 (J)						
3/19/2020	0.0012 (J)	0.023 (J)	0.014 (J)					
3/25/2020				0.011 (J)			0.0032 (J)	
3/26/2020						<0.03		
9/23/2020		0.023 (J)	0.013 (J)			<0.03		
9/24/2020	0.0011 (J)			0.001 (J)				
9/25/2020					0.028 (J)			
10/7/2020							0.0014 (J)	
2/9/2021					0.024 (J)	<0.03		
2/10/2021		0.023 (J)	0.015 (J)	0.0012 (J)			0.0011 (J)	
2/11/2021	0.0012 (J)							
3/1/2021	0.0011 (J)							
3/3/2021		0.024 (J)	0.017 (J)			<0.03		
3/4/2021				0.0015 (J)	0.028 (J)		<0.03	
8/19/2021	0.0012 (J)	0.023 (J)						
8/25/2021					0.023 (J)			
8/27/2021			0.026 (J)					
9/1/2021				0.0019 (J)		<0.03		
9/3/2021							0.00086 (J)	0.013 (J)

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.0002	<0.0002		
6/7/2016					9.5E-05 (J)			9.6E-05 (J)	9.6E-05 (J)
7/27/2016					<0.0002	<0.0002	<0.0002	<0.0002	
7/28/2016									<0.0002
9/16/2016					<0.0002		<0.0002		
9/19/2016						<0.0002		<0.0002	<0.0002
11/2/2016								<0.0002	
11/3/2016					<0.0002	<0.0002	<0.0002		<0.0002
1/11/2017					<0.0002	<0.0002	<0.0002		
1/13/2017								<0.0002	<0.0002
3/1/2017						<0.0002	<0.0002		
3/2/2017					<0.0002				
3/6/2017								<0.0002	<0.0002
4/26/2017						<0.0002	<0.0002	<0.0002	<0.0002
5/2/2017					<0.0002				
6/28/2017						<0.0002	<0.0002		
6/29/2017					<0.0002			<0.0002	<0.0002
3/28/2018					<0.0002	<0.0002	<0.0002		
3/29/2018								<0.0002	<0.0002
9/25/2018					<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
3/5/2019					<0.0002		<0.0002	<0.0002	<0.0002
3/6/2019						<0.0002			
2/11/2020					<0.0002	<0.0002	<0.0002		
2/12/2020								<0.0002	<0.0002
9/23/2020		<0.0002	<0.0002						
9/24/2020	<0.0002			<0.0002					
2/9/2021	<0.0002	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002
3/3/2021	<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	<0.0002	<0.0002	
3/4/2021				<0.0002					<0.0002
8/25/2021			<0.0002						
8/26/2021				<0.0002			<0.0002		
8/27/2021					<0.0002	<0.0002		<0.0002	
9/1/2021	<0.0002	<0.0002							<0.0002

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.0002	<0.0002	<0.0002				
6/7/2016						9.8E-05 (J)			
7/26/2016			<0.0002	<0.0002	<0.0002				
7/28/2016						<0.0002			
8/30/2016									<0.0002
9/14/2016			<0.0002	<0.0002	<0.0002				
9/20/2016						<0.0002			
11/2/2016			<0.0002	<0.0002					
11/4/2016					<0.0002				
11/8/2016						<0.0002			
11/16/2016									<0.0002
1/12/2017				<0.0002	<0.0002				
1/13/2017			<0.0002						
1/16/2017						<0.0002			
2/27/2017									<0.0002
3/6/2017			<0.0002						
3/7/2017				<0.0002	<0.0002				
3/9/2017						<0.0002			
5/1/2017			<0.0002	<0.0002					
5/2/2017					<0.0002	<0.0002			
5/10/2017									<0.0002
6/27/2017				<0.0002	<0.0002				
6/29/2017			<0.0002						
7/10/2017						<0.0002			
7/11/2017									<0.0002
10/11/2017	<0.0002								
10/12/2017		<0.0002					<0.0002	<0.0002	<0.0002
11/20/2017	7E-05 (J)	8E-05 (J)					8E-05 (J)		
11/21/2017								6E-05 (J)	
1/10/2018		<0.0002							
1/11/2018	<0.0002							<0.0002	
1/12/2018							<0.0002		
2/19/2018		<0.0002						<0.0002	
2/20/2018	<0.0002						<0.0002		
3/29/2018			<0.0002	<0.0002	<0.0002				
3/30/2018						<0.0002			
4/3/2018	<0.0002	<0.0002					<0.0002	<0.0002	
4/4/2018									<0.0002
6/27/2018								<0.0002	
6/28/2018	<0.0002	3.6E-05 (J)					3.7E-05 (J)		
8/7/2018	<0.0002	<0.0002					<0.0002	<0.0002	
9/20/2018									4.8E-05 (J)
9/24/2018	<0.0002	<0.0002					<0.0002	<0.0002	
9/26/2018			<0.0002	<0.0002	<0.0002				
9/27/2018						<0.0002			
3/4/2019			<0.0002	<0.0002	<0.0002				
3/6/2019						<0.0002			
8/21/2019	<0.0002	<0.0002							
8/22/2019							<0.0002	<0.0002	<0.0002
2/12/2020	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002				
2/8/2021				<0.0002	<0.0002				
2/9/2021			<0.0002			0.00015 (J)	<0.0002		

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
2/10/2021	<0.0002	<0.0002						<0.0002	<0.0002
3/2/2021				<0.0002	<0.0002				
3/3/2021			<0.0002						
3/4/2021	<0.0002	<0.0002				<0.0002	<0.0002	<0.0002	<0.0002
8/25/2021						<0.0002			<0.0002
8/26/2021	<0.0002		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002	
9/3/2021		0.00012 (J)							

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.0002
7/26/2016					<0.0002	<0.0002			
8/30/2016			<0.0002						
8/31/2016	<0.0002			<0.0002					
9/1/2016		<0.0002							
9/13/2016						<0.0002	<0.0002		
9/14/2016								<0.0002	
9/15/2016					<0.0002				
9/19/2016									<0.0002
11/1/2016						<0.0002			<0.0002
11/2/2016					<0.0002				
11/4/2016							<0.0002	<0.0002	
11/14/2016			<0.0002						
11/15/2016		<0.0002							
11/16/2016	<0.0002								
11/28/2016				<0.0002					
12/15/2016								<0.0002	
1/10/2017					<0.0002				
1/11/2017						<0.0002			
1/16/2017							<0.0002	<0.0002	<0.0002
2/21/2017									<0.0002
2/22/2017				<0.0002					
2/24/2017	<0.0002		<0.0002						
2/27/2017		<0.0002							
3/2/2017						<0.0002	<0.0002		
3/3/2017								<0.0002	
3/8/2017					<0.0002				
4/26/2017					<0.0002				<0.0002
4/27/2017						<0.0002	<0.0002		
4/28/2017								<0.0002	
5/8/2017			<0.0002	<0.0002					

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/9/2017		<0.0002							
5/10/2017	<0.0002								
5/26/2017								<0.0002	
6/27/2017						<0.0002	<0.0002		
6/28/2017								<0.0002	
6/30/2017					<0.0002				<0.0002
7/11/2017	<0.0002		<0.0002						
7/13/2017		<0.0002							
7/17/2017				<0.0002					
10/10/2017			<0.0002						
10/11/2017		<0.0002							
10/12/2017	<0.0002								
10/16/2017				<0.0002					
2/19/2018				<0.0002					
3/27/2018					<0.0002		<0.0002		<0.0002
3/28/2018								<0.0002	
3/29/2018						<0.0002			
4/2/2018			<0.0002						
4/4/2018	<0.0002	<0.0002							
8/6/2018				<0.0002					
9/19/2018			5.3E-05 (J)						
9/20/2018	5.2E-05 (J)	6.1E-05 (J)							
2/25/2019				7.4E-05 (J)					
2/26/2019					6.1E-05 (J)				6.8E-05 (J)
2/27/2019						5.1E-05 (J)	5.4E-05 (J)	<0.0002	
3/28/2019						4E-05 (J)	<0.0002		
3/29/2019					<0.0002			<0.0002	
4/1/2019									8.2E-05 (J)
6/12/2019				<0.0002					
8/19/2019				<0.0002					
8/20/2019			<0.0002						
8/21/2019	<0.0002								
9/24/2019						<0.0002	<0.0002	<0.0002	
9/25/2019					<0.0002				<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					
8/27/2020			<0.0002						
9/22/2020				<0.0002					
2/9/2021	<0.0002	0.00014 (J)							
2/10/2021					<0.0002			<0.0002	
2/11/2021									<0.0002
2/12/2021						<0.0002	<0.0002		
3/2/2021				<0.0002					
3/4/2021	<0.0002	<0.0002							
8/19/2021			<0.0002						
8/20/2021				<0.0002					
9/1/2021		<0.0002							
9/27/2021	9E-05 (JB)								

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		<0.0002					
6/2/2016	<0.0002						
6/8/2016					<0.0002		
7/25/2016		<0.0002					
7/26/2016	<0.0002						
8/1/2016					<0.0002		
9/2/2016						<0.0002	
9/14/2016		<0.0002					
9/15/2016	<0.0002						
9/20/2016					<0.0002		
11/1/2016	<0.0002	<0.0002					
11/8/2016					<0.0002		
11/14/2016						<0.0002	
1/11/2017	<0.0002	<0.0002					
1/17/2017					<0.0002		
2/28/2017						<0.0002	
3/1/2017		<0.0002					
3/2/2017	<0.0002						
3/8/2017					<0.0002		
4/26/2017	<0.0002	<0.0002					
5/2/2017					<0.0002		
5/9/2017						<0.0002	
6/28/2017	<0.0002	<0.0002					
7/7/2017					<0.0002		
7/13/2017						<0.0002	
9/22/2017						<0.0002	
9/29/2017						<0.0002	
10/6/2017						<0.0002	
10/12/2017				<0.0002			
11/21/2017				6E-05 (J)			
1/11/2018				<0.0002			
2/20/2018				<0.0002			
3/28/2018	<0.0002	<0.0002					
3/30/2018					<0.0002	<0.0002	
4/3/2018				<0.0002			
6/29/2018				<0.0002			
8/6/2018				<0.0002			
9/24/2018				<0.0002			
9/26/2018					<0.0002	<0.0002	
2/27/2019	6.2E-05 (J)	6.1E-05 (J)					
3/5/2019					<0.0002		
3/6/2019						<0.0002	
4/1/2019	9.6E-05 (J)	8.4E-05 (J)					
9/25/2019	<0.0002	<0.0002					
2/11/2020		<0.0002					
2/12/2020	<0.0002						
9/24/2020			<0.0002				
9/25/2020				<0.0002			
2/9/2021				<0.0002	<0.0002		
2/10/2021	<0.0002	<0.0002	<0.0002			<0.0002	
3/3/2021					<0.0002		
3/4/2021			<0.0002	<0.0002		<0.0002	

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
8/25/2021				<0.0002			
9/1/2021			<0.0002		<0.0002		
9/3/2021						<0.0002	<0.0002

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.01	<0.01		
6/7/2016					<0.01			<0.01	<0.01
7/27/2016					<0.01	<0.01	<0.01	<0.01	
7/28/2016									<0.01
9/16/2016					<0.01		<0.01		
9/19/2016						<0.01		<0.01	<0.01
11/2/2016								<0.01	
11/3/2016					<0.01	<0.01	<0.01		<0.01
1/11/2017					<0.01	<0.01	<0.01		
1/13/2017								<0.01	<0.01
3/1/2017						<0.01	<0.01		
3/2/2017					<0.01				
3/6/2017								<0.01	0.0007 (J)
4/26/2017						<0.01	<0.01	<0.01	0.0008 (J)
5/2/2017					<0.01				
6/28/2017						<0.01	<0.01		
6/29/2017					<0.01			<0.01	<0.01
3/28/2018					<0.01	<0.01	<0.01		
3/29/2018								<0.01	<0.01
3/5/2019					<0.01		<0.01	<0.01	<0.01
3/6/2019						<0.01			
2/11/2020					<0.01	<0.01	<0.01		
2/12/2020								<0.01	<0.01
3/24/2020					<0.01	<0.01	<0.01	<0.01	<0.01
3/25/2020	<0.01								
9/23/2020		<0.01	0.0068 (J)		<0.01	<0.01	<0.01		
9/24/2020	0.0022 (J)			<0.01				<0.01	<0.01
2/9/2021	0.0038 (J)	<0.01	0.0068 (J)	<0.01		<0.01	<0.01	<0.01	<0.01
3/3/2021	0.0037 (J)	<0.01	0.0049 (J)		<0.01	<0.01	<0.01	<0.01	
3/4/2021				<0.01					<0.01
8/25/2021			0.0081 (J)						
8/26/2021				<0.01			<0.01		
8/27/2021					<0.01	<0.01		<0.01	
9/1/2021	0.0014 (J)	<0.01							<0.01

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.01	0.0035 (J)	<0.01				
6/7/2016						<0.01			
7/26/2016			<0.01	0.0042 (J)	<0.01				
7/28/2016						<0.01			
8/30/2016									0.0019 (J)
9/14/2016			<0.01	0.0041 (J)	<0.01				
9/20/2016						<0.01			
11/2/2016			<0.01	0.0039 (J)					
11/4/2016					<0.01				
11/8/2016						<0.01			
11/16/2016									0.0027 (J)
1/12/2017				0.0041 (J)	<0.01				
1/13/2017			<0.01						
1/16/2017						<0.01			
2/27/2017									0.0031 (J)
3/6/2017			<0.01						
3/7/2017				0.0047 (J)	<0.01				
3/9/2017						<0.01			
5/1/2017			<0.01	0.0045 (J)					
5/2/2017					<0.01	<0.01			
5/10/2017									0.0017 (J)
6/27/2017				0.004 (J)	<0.01				
6/29/2017			<0.01						
7/10/2017						<0.01			
7/11/2017									0.0014 (J)
10/11/2017	0.0094 (J)								
10/12/2017		<0.01					<0.01	<0.01	<0.01
11/20/2017	0.0081 (J)	<0.01					<0.01		
11/21/2017								<0.01	
1/10/2018		<0.01							
1/11/2018	0.0074 (J)							<0.01	
1/12/2018							<0.01		
2/19/2018		<0.01						<0.01	
2/20/2018	<0.01						<0.01		
3/29/2018			<0.01	<0.01	<0.01				
3/30/2018						<0.01			
4/3/2018	0.006 (J)	<0.01					<0.01	<0.01	
4/4/2018									<0.01
6/27/2018								<0.01	
6/28/2018	0.005 (J)	<0.01					<0.01		
8/7/2018	0.0045 (J)	<0.01					<0.01	<0.01	
9/20/2018									<0.01
9/24/2018	0.0035 (J)	<0.01					<0.01	<0.01	
3/4/2019			<0.01	<0.01	<0.01				
3/6/2019						<0.01			
8/21/2019	0.0021 (J)	<0.01							
8/22/2019							<0.01	<0.01	<0.01
10/9/2019	0.0018 (J)	<0.01					<0.01	<0.01	<0.01
2/12/2020	0.0025 (J)	<0.01	<0.01	0.0011 (J)	<0.01				
3/24/2020		<0.01		0.0011 (J)	<0.01				
3/25/2020	0.002 (J)		<0.01				<0.01	<0.01	<0.01
3/26/2020						<0.01			

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
9/22/2020			<0.01	0.00099 (J)	<0.01				
9/24/2020	0.0016 (J)	<0.01				<0.01			0.00091 (J)
9/25/2020							<0.01	<0.01	
2/8/2021				0.0011 (J)	<0.01				
2/9/2021			<0.01			<0.01	<0.01		
2/10/2021	0.0013 (J)	<0.01						<0.01	0.00094 (J)
3/2/2021				<0.01	<0.01				
3/3/2021			<0.01						
3/4/2021	0.0014 (J)	<0.01				<0.01	<0.01	<0.01	0.00085 (J)
8/25/2021						<0.01			0.00078 (J)
8/26/2021	0.0027 (J)		<0.01	0.001 (J)	<0.01		<0.01	<0.01	
9/3/2021		<0.01							

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						0.014 (J)	0.012 (J)		
6/2/2016					<0.01				<0.01
7/25/2016							0.0098 (J)		<0.01
7/26/2016					<0.01	0.0132			
8/30/2016			<0.01						
8/31/2016	0.0022 (J)			<0.01					
9/1/2016		<0.01							
9/13/2016						0.0127	0.01 (J)		
9/14/2016								0.0039 (J)	
9/15/2016					<0.01				
9/19/2016									<0.01
11/1/2016						0.0092 (J)			<0.01
11/2/2016					<0.01				
11/4/2016							0.01	0.0077 (J)	
11/14/2016			<0.01						
11/15/2016		<0.01							
11/16/2016	<0.01								
11/28/2016				<0.01					
12/15/2016								0.0066 (J)	
1/10/2017					<0.01				
1/11/2017						0.0093 (J)			
1/16/2017							0.0086 (J)	0.0056 (J)	<0.01
2/21/2017									<0.01
2/22/2017				<0.01					
2/24/2017	<0.01		<0.01						
2/27/2017		0.0007 (J)							
3/2/2017						0.0099 (J)	0.01		
3/3/2017								0.0049 (J)	
3/8/2017					<0.01				
4/26/2017					<0.01				<0.01
4/27/2017						0.0103	0.0101		
4/28/2017								0.004 (J)	
5/8/2017			<0.01	<0.01					
5/9/2017		<0.01							
5/10/2017	<0.01								
5/26/2017								0.0029 (J)	
6/27/2017						0.0097 (J)	0.0093 (J)		
6/28/2017								0.0036 (J)	
6/30/2017					<0.01				<0.01
7/11/2017	<0.01		<0.01						
7/13/2017		<0.01							
7/17/2017				<0.01					
10/10/2017			<0.01						
10/11/2017		<0.01							
10/12/2017	<0.01								
10/16/2017				<0.01					
2/19/2018				<0.01					
3/27/2018					<0.01		0.0074 (J)		<0.01
3/28/2018								0.0038 (J)	
3/29/2018						0.0076 (J)			
4/2/2018			<0.01						
4/4/2018	<0.01	<0.01							

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						0.0092 (J)			
6/6/2018							0.0073 (J)		
6/7/2018								0.004 (J)	
6/8/2018					<0.01				
6/11/2018									<0.01
8/6/2018				<0.01					
9/19/2018			<0.01						
9/20/2018	<0.01	<0.01							
10/1/2018					<0.01	0.0085 (J)	0.0076 (J)	0.0042 (J)	
10/2/2018									<0.01
2/26/2019					<0.01				<0.01
2/27/2019						0.0087 (J)	0.0078 (J)	0.0041 (J)	
3/28/2019						0.0092 (J)	0.0082 (J)		
3/29/2019					<0.01			0.0041 (J)	
4/1/2019									<0.01
8/19/2019				<0.01					
8/20/2019			<0.01						
8/21/2019	0.0012 (J)								
9/24/2019						0.0072 (J)	0.0074 (J)	0.0054 (J)	
9/25/2019					<0.01				<0.01
10/8/2019			<0.01						
10/9/2019	0.0012 (J)								
2/10/2020						0.0087 (J)	0.0062 (J)		
2/11/2020								0.0057 (J)	
2/12/2020					<0.01				<0.01
3/17/2020			<0.01						
3/18/2020					<0.01		0.0056 (J)		
3/19/2020						0.0088 (J)		0.0046 (J)	<0.01
3/25/2020	0.0015 (J)	<0.01							
8/26/2020				<0.01					
8/27/2020			<0.01						
9/22/2020			<0.01						
9/23/2020						0.008 (J)	0.0059 (J)	0.0071 (J)	
9/24/2020		<0.01							<0.01
9/25/2020	0.0011 (J)				<0.01				
2/9/2021	0.0012 (J)	<0.01							
2/10/2021					<0.01			0.0041 (J)	
2/11/2021									<0.01
2/12/2021						0.008 (J)	0.0056 (J)		
3/1/2021			<0.01						<0.01
3/2/2021					<0.01				
3/3/2021						0.0088 (J)	0.0049 (J)	0.0074 (J)	
3/4/2021	0.0011 (J)	<0.01							
8/19/2021			<0.01		<0.01	0.0083 (J)	0.005 (J)		<0.01
8/20/2021				<0.01					
8/27/2021								0.0048 (J)	
9/1/2021		<0.01							
9/27/2021	0.0062 (J)								

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		0.0055 (J)					
6/2/2016	0.0093 (J)						
6/8/2016					<0.01		
7/25/2016		0.0037 (J)					
7/26/2016	0.0113						
8/1/2016					<0.01		
9/2/2016						0.0027 (J)	
9/14/2016		0.0034 (J)					
9/15/2016	0.0112						
9/20/2016					<0.01		
11/1/2016	0.0099 (J)	0.0025 (J)					
11/8/2016					<0.01		
11/14/2016						0.0071 (J)	
1/11/2017	0.0093 (J)	0.0033 (J)					
1/17/2017					<0.01		
2/28/2017						0.0038 (J)	
3/1/2017		0.0044 (J)					
3/2/2017	0.0103						
3/8/2017					<0.01		
4/26/2017	0.01	0.0075 (J)					
5/2/2017					<0.01		
5/9/2017						0.0025 (J)	
6/28/2017	0.0102	0.008 (J)					
7/7/2017					<0.01		
7/13/2017						0.0014 (J)	
9/22/2017						<0.01	
9/29/2017						<0.01	
10/6/2017						<0.01	
10/12/2017				0.0022 (J)			
11/21/2017				0.0016 (J)			
1/11/2018				0.0015 (J)			
2/20/2018				<0.01			
3/28/2018	0.011	0.0025 (J)					
3/30/2018					<0.01	<0.01	
4/3/2018				<0.01			
6/7/2018	0.011						
6/8/2018		0.0041 (J)					
6/29/2018				0.0021 (J)			
8/6/2018				<0.01			
9/24/2018				<0.01			
10/1/2018	0.012	0.0037 (J)					
2/27/2019	0.011	0.0027 (J)					
3/5/2019					<0.01		
3/6/2019						<0.01	
4/1/2019	0.012	0.0021 (J)					
9/25/2019	0.012	0.0087 (J)					
2/11/2020		0.003 (J)					
2/12/2020	0.013						
3/19/2020	0.013	0.0043 (J)					
3/25/2020			0.0019 (J)			<0.01	
3/26/2020					<0.01		
9/23/2020	0.012	0.01			<0.01		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
9/24/2020			<0.01				
9/25/2020				0.0016 (J)			
10/7/2020						0.0015 (J)	
2/9/2021				0.0016 (J)	<0.01		
2/10/2021	0.014	0.0038 (J)	<0.01			<0.01	
3/3/2021	0.013	0.0036 (J)			<0.01		
3/4/2021			<0.01	0.0024 (J)		<0.01	
8/19/2021	0.013						
8/25/2021				0.0011 (J)			
8/27/2021		0.0099 (J)					
9/1/2021			<0.01		<0.01		
9/3/2021						<0.01	0.0018 (J)

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-3	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)
6/6/2016							6.17	5.71	
6/7/2016						5.62			5.77
7/27/2016						5.59	6.14	5.46	5.79
9/16/2016						5.58			
9/19/2016							6.04	5.59	5.73
11/2/2016									5.67
11/3/2016						5.59	5.97	5.39	
1/11/2017						5.59	6.05	5.48	
1/13/2017									5.79
3/1/2017							5.94	5.41	
3/2/2017						5.54			
3/6/2017									5.63
4/26/2017							5.99	5.4	5.66
5/2/2017						5.47			
6/28/2017							6	5.36	
6/29/2017						5.56			5.85
10/4/2017						5.57		5.32	5.83
10/5/2017							6.11		
3/28/2018						5.59	6.1	5.34	
3/29/2018									5.93
6/6/2018									5.86
6/7/2018							5.98		
6/11/2018						5.58		5.28	
9/25/2018						5.59	5.81	4.86	5.84
3/5/2019						5.48		5.26	6.07
3/6/2019							5.99		
4/2/2019						5.74			
4/3/2019							6.29	5.47	5.71
9/25/2019						5.49			5.86
9/26/2019							6.04	5.2	
1/3/2020	5.78								
1/15/2020		6.25			5.64				
1/16/2020			6.67	6.47					
2/11/2020			6.62		5.37	5.58	6.07	5.3	
2/12/2020									6
3/24/2020						5.57	5.98	5.33	5.86
3/25/2020	6.13								
9/23/2020		5.66		5.89		5.58 (D)	6.01 (D)	5.29 (D)	
9/24/2020	6				5.38				5.8 (D)
2/9/2021	6.42	5.81		6.96	5.34		6.12	5.43	5.86
3/3/2021	6.54	5.67		6.8		5.52	5.89	5.31	5.89
3/4/2021					5.32				
8/25/2021				6.79					
8/26/2021					5.35			4.4	
8/27/2021						5.27	5.4		5.57
9/1/2021	5.97	6.67							
9/3/2021			5.74						

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
6/2/2016				6.36	7.67	5.75			
6/7/2016	6.1						5.57		
7/26/2016				6.22	7.66	5.72			
7/28/2016	6.12						5.6		
9/14/2016				6.23	7.6	5.74			
9/19/2016	6.12								
9/20/2016							5.53		
11/2/2016				6.08	7.35				
11/3/2016	6.07								
11/4/2016						5.61			
11/8/2016							5.53		
1/12/2017					7.49	5.71			
1/13/2017	6.41			6.19					
1/16/2017							5.59		
3/6/2017	6.34			6.2					
3/7/2017					7.43	5.66			
3/9/2017							5.56		
4/26/2017	6.32								
5/1/2017				6.21	7.22				
5/2/2017						5.65	5.61		
6/27/2017					7.32	5.7			
6/29/2017	6.47			6.21					
7/10/2017							5.68		
10/3/2017	6.56				7.48	5.79			
10/5/2017				6.16					
10/11/2017		6.4					5.46		
10/12/2017			5.43					4.85	4.94
11/20/2017		6.33	5.1					4.87	
11/21/2017									4.69
1/10/2018			4.97						
1/11/2018		6.29							4.73
1/12/2018								4.78	
2/19/2018			5.6						4.96
2/20/2018		7.22						5.1	
3/29/2018	6.75			6.09	7.02	5.63			
3/30/2018							5.73		
4/3/2018		6.87	5.84					4.76	5.31
6/5/2018	6.09								
6/6/2018					7.43				
6/7/2018				6.12		5.63			
6/12/2018							5.63		
6/27/2018									4.78
6/28/2018		6.18	5.24					4.75	
8/7/2018		6.08	5.18					4.72	4.77
9/24/2018		5.81	5.14					4.67	4.78
9/25/2018	6.67								
9/26/2018				5.84	7.13	5.63			
9/27/2018							5.47		
3/4/2019				6.18	7.46	5.75			
3/5/2019	7.22								
3/6/2019							5.84		
3/26/2019			5.3						

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
3/27/2019		5.84						4.79	
3/28/2019									5
4/2/2019	6.94								
4/3/2019				6.43	7.11	5.63			
4/4/2019							5.64		
8/21/2019		5.96	5.26						
8/22/2019								4.81	4.89
9/24/2019	6.87				6.93	5.6			
9/25/2019				6.2					
9/27/2019							5.77		
10/9/2019		5.81	5.22					4.8	4.86
2/12/2020	7.13	5.97	5.3	6.15	7.52	5.83			
3/24/2020	6.35		5.29		7.34	5.81			
3/25/2020		5.78		6.26				4.89	4.87
3/26/2020							5.69		
9/22/2020				5.8 (D)	7.19 (D)	5.99 (D)			
9/24/2020	6.7 (D)	5.7 (D)	5.43 (D)				5.51		
9/25/2020								4.9	4.95
2/8/2021						5.67			
2/9/2021	6.95			6.06			5.61	5.04	
2/10/2021		5.8	5.19						4.98
3/2/2021					7.15	5.63			
3/3/2021				6.21					
3/4/2021	6.8	5.54	5.23				5.44	5.01	4.69
8/25/2021							5.46		
8/26/2021		6.91		5.82	7.16	5.51		4.54	6.77
9/1/2021	6.65								
9/3/2021			4.75						

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (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						5.46			
7/25/2016								6.21	
7/26/2016						5.45	7.43		
8/30/2016	5.64			5.75					
8/31/2016		7.27							
9/1/2016			5.78						
9/13/2016							7.44	6.16	7.41
9/15/2016						5.45			
11/1/2016							7.24		
11/2/2016						5.41			
11/4/2016								6.29	7.12
11/14/2016				5.59					
11/15/2016			5.81						
11/16/2016	6.21	6.79							
11/28/2016					6.23				
12/15/2016									7.24
1/10/2017						5.37			
1/11/2017							7.3		
1/16/2017								6.29	7.24
2/22/2017					6.21				
2/24/2017		6.39		5.49					
2/27/2017	6.09		5.68						
3/2/2017							7.23	6.28	
3/3/2017									7.22
3/8/2017						5.41			
4/26/2017						5.02			
4/27/2017							6.99	6.09	
4/28/2017									7.21
5/8/2017				5.58	6.12				
5/9/2017			6.18						
5/10/2017	5.79	6.5							
5/26/2017									7.13
6/27/2017							6.87	6.21	
6/28/2017									7.06
6/30/2017						5.39			
7/11/2017	5.45	6.32		5.58					
7/13/2017			5.6						
7/17/2017					6.03				

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
10/3/2017							6.81	5.98	6.99
10/5/2017						5.49			
10/10/2017				5.49					
10/11/2017			5.61						
10/12/2017	5.48	5.97							
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							7.38		
4/2/2018				6.3 (O)					
4/4/2018	5.93	6.41	5.98						
6/5/2018							7.16		
6/6/2018								6.17	
6/7/2018									7.29
6/8/2018						5.45			
8/6/2018					6.01				
9/19/2018				5.48					
9/20/2018	5.63	5.69	5.67						
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
3/27/2019	5.57			5.83					
3/28/2019		5.96	5.86				6.99	6.15	
3/29/2019						5.34			7.06
6/12/2019					6.3				
8/19/2019					6.23				
8/20/2019				5.58					
8/21/2019		5.84							
8/22/2019	5.61								
9/24/2019							7.07	6.23	7.01
9/25/2019						5.19			
9/26/2019			5.6						
10/8/2019				5.59	6.28				
10/9/2019	5.5	5.78							
2/10/2020							7.2	6.1	
2/11/2020									7.38
2/12/2020						5.48			
3/17/2020				5.57	6.14				
3/18/2020						5.38		6.19	
3/19/2020							7.03		7.22
3/25/2020	5.53	5.79	5.69						
5/6/2020					6.24				
8/26/2020					5.67				
8/27/2020				4.88					
9/22/2020				5.46	5.78				
9/23/2020							7.15	6.01	7.22
9/24/2020	5.55		5.62						
9/25/2020		5.75				5.44			
2/9/2021		5.86	5.79						
2/10/2021	5.65					5.35			7.29

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
2/12/2021							7.14	6.21	
3/1/2021				5.48					
3/2/2021					5.42	5.49			
3/3/2021							7.2	5.38	7.92
3/4/2021	5.59	5.88	5.88						
8/19/2021				5.5		7.32	6.32	6.38	
8/20/2021					5.86				
8/25/2021	6.73								
8/27/2021									7.14
9/1/2021			5.15						
9/27/2021		6.08							

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016			7.72					
6/2/2016	5.75	7.84						
6/8/2016						5.65		
7/25/2016	5.82		7.74					
7/26/2016		7.88						
8/1/2016						5.47		
9/2/2016							5.84	
9/14/2016			7.65					
9/15/2016		7.74						
9/19/2016	5.78 (D)							
9/20/2016						5.61		
11/1/2016	5.62	7.75	7.7					
11/8/2016						5.55		
11/14/2016							6.28	
1/11/2017		7.66	7.53					
1/16/2017	5.72							
1/17/2017						5.53		
2/21/2017	5.67							
2/28/2017							5.99	
3/1/2017			7.42					
3/2/2017		7.68						
3/8/2017						5.62		
4/26/2017	5.56	7.45	7.4					
5/2/2017						5.46		
5/9/2017							6.3	
6/28/2017		7.65	7.5					
6/30/2017	5.72							
7/7/2017						5.81		
7/13/2017							5.57	
9/22/2017							5.5	
9/29/2017							5.58	
10/4/2017	5.87	7.49	7.45					
10/5/2017						5.45		
10/6/2017							5.51	
10/11/2017							5.47	
10/12/2017					5.57			
11/21/2017					5.49			
1/11/2018					5.87			
2/20/2018					5.9			
3/27/2018	5.83							
3/28/2018		7.91	7.74					
3/30/2018						5.64	5.51	
4/3/2018					5.66			
6/7/2018		7.69						
6/8/2018			7.64					
6/11/2018	5.69							
6/12/2018						5.64		
6/13/2018							5.5	
6/29/2018					5.49			
8/6/2018					5.52			
9/24/2018					5.37			
9/26/2018						5.61	5.53	

Time Series

Constituent: pH (S.U.) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
10/1/2018		7.39	7.47					
10/2/2018	5.39							
2/26/2019	5.77							
2/27/2019		7.55	7.54					
3/5/2019						5.72		
3/6/2019							5.21	
4/1/2019	5.62	7.87	7.74					
4/4/2019						5.66	5.74	
9/25/2019	5.69	7.64	7.47					
9/26/2019						5.52	5.51	
2/11/2020			7.09					
2/12/2020	5.8	7.83						
3/19/2020	6	7.65	7.31					
3/25/2020				5.65			5.49	
3/26/2020						5.51		
9/23/2020		7.57	7.37			5.64		
9/24/2020	5.67			5.52				
9/25/2020					5.46			
10/7/2020							5.86	
2/9/2021					5.42	5.69		
2/10/2021		7.81	7.58	5.53			6.31	
2/11/2021	5.73							
3/1/2021	5.78							
3/3/2021		8.39	8.23			5.7		
3/4/2021				5.64	5.51		5.67	
8/19/2021		5.34						
8/25/2021					5.48			
8/27/2021			7.39					
9/1/2021				6.82		5.22		
9/3/2021							5.06	7.44

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-3	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)
6/6/2016							<0.005	<0.005	
6/7/2016						0.001 (J)			<0.005
7/27/2016						0.0012 (J)	<0.005	<0.005	<0.005
9/16/2016						0.0015 (J)		<0.005	
9/19/2016							<0.005		<0.005
11/2/2016									<0.005
11/3/2016						0.0015 (J)	<0.005	<0.005	
1/11/2017						0.0014 (J)	<0.005	<0.005	
1/13/2017									<0.005
3/1/2017							<0.005	<0.005	
3/2/2017						0.0017 (J)			
3/6/2017									<0.005
4/26/2017							<0.005	<0.005	<0.005
5/2/2017						<0.005			
6/28/2017							<0.005	<0.005	
6/29/2017						<0.005			<0.005
3/28/2018						<0.005	<0.005	<0.005	
3/29/2018									<0.005
6/6/2018									<0.005
6/7/2018							<0.005		
6/11/2018						<0.005		<0.005	
9/25/2018						<0.005	<0.005	<0.005	<0.005
10/16/2018	0.0019 (J)								
3/5/2019						<0.005		<0.005	<0.005
3/6/2019							<0.005		
4/2/2019						<0.005			
4/3/2019							<0.005	<0.005	<0.005
9/25/2019						<0.005			<0.005
9/26/2019	<0.005						<0.005	<0.005	
1/15/2020		<0.005			0.045				
1/16/2020			<0.005	0.0018 (J)					
2/11/2020						<0.005	<0.005	<0.005	
2/12/2020									<0.005
3/24/2020						<0.005	<0.005	<0.005	<0.005
3/25/2020	<0.005								
9/23/2020		<0.005		0.016		<0.005	<0.005	<0.005	
9/24/2020	<0.005				0.026				<0.005
2/9/2021	<0.005	<0.005		<0.005	0.06		<0.005	<0.005	<0.005
3/3/2021	<0.005	<0.005		<0.005		<0.005	<0.005	<0.005	<0.005
3/4/2021					0.061				
8/25/2021				0.019					
8/26/2021					0.055			<0.005	
8/27/2021						<0.005	<0.005		<0.005
9/1/2021	0.0027 (J)	<0.005							

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
6/2/2016				<0.005	<0.005	<0.005			
6/7/2016	0.00048 (J)						0.037		
7/26/2016				0.0009 (J)	<0.005	0.0009 (J)			
7/28/2016	<0.005						0.0385		
9/14/2016				<0.005	<0.005	<0.005			
9/19/2016	0.0014 (J)								
9/20/2016							0.0464		
11/2/2016				<0.005	<0.005				
11/3/2016	<0.005								
11/4/2016						<0.005			
11/8/2016							0.0521		
1/12/2017					<0.005	<0.005			
1/13/2017	<0.005			<0.005					
1/16/2017							0.0469		
3/6/2017	<0.005			<0.005					
3/7/2017					<0.005	<0.005			
3/9/2017							0.0437		
4/26/2017	<0.005								
5/1/2017				<0.005	<0.005				
5/2/2017						<0.005	0.0395		
6/27/2017					<0.005	<0.005			
6/29/2017	<0.005			<0.005					
7/10/2017							0.0386		
10/11/2017		<0.005							
10/12/2017			<0.005					0.265	0.0191
11/20/2017		<0.005	0.0042 (J)					0.246	
11/21/2017									0.0687
1/10/2018			0.0043 (J)						
1/11/2018		<0.005							0.069
1/12/2018								0.249	
2/19/2018			<0.005						0.071
2/20/2018		<0.005						0.253	
3/29/2018	<0.005			<0.005	<0.005	<0.005			
3/30/2018							0.028		
4/3/2018		<0.005	<0.005					0.23	0.067
6/5/2018	<0.005								
6/6/2018					<0.005				
6/7/2018				<0.005		<0.005			
6/12/2018							0.026		
6/27/2018									0.066
6/28/2018		<0.005	0.0032 (J)					0.23	
8/7/2018		<0.005	0.0031 (J)					0.2	0.061
9/24/2018		0.0015 (J)	0.0026 (J)					0.2	0.061
9/25/2018	<0.005								
9/26/2018				<0.005	<0.005	<0.005			
9/27/2018							0.023		
3/4/2019				<0.005	<0.005	<0.005			
3/5/2019	<0.005								
3/6/2019							0.019		
4/2/2019	<0.005								
4/3/2019				<0.005	<0.005	<0.005			
4/4/2019							0.017		

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-21I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41
8/21/2019		<0.005	0.0024 (J)						
8/22/2019								0.14	0.058
9/24/2019	<0.005				<0.005	<0.005			
9/25/2019				<0.005					
9/27/2019							0.018		
10/9/2019		<0.005	0.0026 (J)					0.12	0.052
2/12/2020	<0.005	<0.005	0.002 (J)	<0.005	<0.005	<0.005			
3/24/2020	<0.005		0.002 (J)		<0.005	<0.005			
3/25/2020		<0.005		<0.005				0.099	0.057
3/26/2020							0.024		
9/22/2020				<0.005	<0.005	<0.005			
9/24/2020	<0.005	<0.005	0.0016 (J)				0.031		
9/25/2020								0.076	0.046
2/8/2021					<0.005	<0.005			
2/9/2021	<0.005			<0.005			0.032	0.073	
2/10/2021		<0.005	<0.005						0.033
3/2/2021					<0.005	<0.005			
3/3/2021				0.0019 (J)					
3/4/2021	<0.005	<0.005	<0.005				0.037	0.076	0.037
8/25/2021							0.032		
8/26/2021		<0.005		<0.005	<0.005	<0.005		0.06	0.027
9/1/2021	<0.005								
9/3/2021			<0.005						

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (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						0.0011 (J)			
7/25/2016								<0.005	
7/26/2016						0.0016 (J)	<0.005		
8/30/2016	0.0711			0.0017 (J)					
8/31/2016		<0.005			<0.005				
9/1/2016			0.0086 (J)						
9/13/2016							<0.005	<0.005	
9/14/2016									<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
11/14/2016				<0.005					
11/15/2016			0.0056 (J)						
11/16/2016	0.0313	<0.005							
11/28/2016					<0.005				
12/15/2016									<0.005
1/10/2017						0.0012 (J)			
1/11/2017							<0.005		
1/16/2017								<0.005	<0.005
2/22/2017					<0.005				
2/24/2017		<0.005		0.0011 (J)					
2/27/2017	0.0316		0.0098 (J)						
3/2/2017							<0.005	<0.005	
3/3/2017									<0.005
3/8/2017						<0.005			
4/26/2017						<0.005			
4/27/2017							<0.005	<0.005	
4/28/2017									<0.005
5/8/2017				<0.005	<0.005				
5/9/2017			0.0076 (J)						
5/10/2017	0.053	<0.005							

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
5/26/2017									<0.005
6/27/2017							<0.005	<0.005	
6/28/2017									<0.005
6/30/2017						<0.005			
7/11/2017	0.0697	<0.005		<0.005					
7/13/2017			0.0093 (J)						
7/17/2017					<0.005				
10/10/2017				<0.005					
10/11/2017			0.0089 (J)						
10/12/2017	0.0594	<0.005							
10/16/2017					<0.005				
2/19/2018					<0.005				
3/27/2018						<0.005		<0.005	
3/28/2018									<0.005
3/29/2018							<0.005		
4/2/2018				<0.005					
4/4/2018	0.055	<0.005	<0.005						
8/6/2018					<0.005				
9/19/2018				<0.005					
9/20/2018	0.041	<0.005	0.0081 (J)						
2/25/2019					<0.005				
2/26/2019						<0.005			
2/27/2019							<0.005	<0.005	<0.005
3/28/2019							<0.005	<0.005	
3/29/2019						0.0019 (J)			<0.005
6/12/2019					<0.005				
8/19/2019					<0.005				
8/20/2019				<0.005					
8/21/2019		<0.005							
8/22/2019	0.047								
9/24/2019							<0.005	<0.005	<0.005
9/25/2019						<0.005			
9/26/2019			0.0077 (J)						
10/8/2019					<0.005				
10/9/2019	0.042	<0.005							
2/10/2020							<0.005	<0.005	
2/11/2020									<0.005
2/12/2020						<0.005			
3/17/2020					<0.005				
3/18/2020						<0.005		<0.005	
3/19/2020							<0.005		<0.005
3/25/2020	0.046	<0.005	0.0085 (J)						
8/26/2020					<0.005				
8/27/2020				<0.005					
9/22/2020					<0.005				
9/23/2020							<0.005	<0.005	<0.005
9/24/2020	0.046		0.0091 (J)						
9/25/2020		<0.005				<0.005			
2/9/2021		<0.005	0.0079 (J)						
2/10/2021	0.043					<0.005			<0.005
2/12/2021							<0.005	<0.005	
3/2/2021					<0.005	<0.005			

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)
3/3/2021							<0.005	<0.005	<0.005
3/4/2021	0.048	<0.005	0.0058						
8/19/2021				<0.005		<0.005	<0.005	<0.005	
8/20/2021					<0.005				
8/25/2021	0.043								
8/27/2021									<0.005
9/1/2021			0.0066						
9/27/2021		<0.005							

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016			<0.005					
6/2/2016	<0.005	<0.005						
6/8/2016						<0.005		
7/25/2016	<0.005		<0.005					
7/26/2016		<0.005						
8/1/2016						<0.005		
9/2/2016							0.0012 (J)	
9/14/2016			<0.005					
9/15/2016		<0.005						
9/19/2016	<0.005							
9/20/2016						<0.005		
11/1/2016	<0.005	<0.005	<0.005					
11/8/2016						<0.005		
11/14/2016							<0.005	
1/11/2017		<0.005	<0.005					
1/16/2017	<0.005							
1/17/2017						<0.005		
2/21/2017	<0.005							
2/28/2017							0.0017 (J)	
3/1/2017			<0.005					
3/2/2017		<0.005						
3/8/2017						<0.005		
4/26/2017	<0.005	<0.005	<0.005					
5/2/2017						<0.005		
5/9/2017							0.0018 (J)	
6/28/2017		<0.005	<0.005					
6/30/2017	<0.005							
7/7/2017						<0.005		
7/13/2017							0.0031 (J)	
9/22/2017							0.0024 (J)	
9/29/2017							0.002 (J)	
10/6/2017							<0.005	
10/12/2017					0.234			
11/21/2017					0.225			
1/11/2018					0.168			
2/20/2018					0.315			
3/27/2018	<0.005							
3/28/2018		<0.005	<0.005					
3/30/2018						<0.005	<0.005	
4/3/2018					0.28			
6/12/2018						<0.005		
6/13/2018							0.0024 (J)	
6/29/2018					0.26			
8/6/2018					0.21			
9/24/2018					0.33			
9/26/2018						<0.005	0.0037 (J)	
10/16/2018				<0.005				
2/26/2019	<0.005							
2/27/2019		<0.005	<0.005					
3/5/2019						<0.005		
3/6/2019							0.0033 (J)	
4/1/2019	<0.005	<0.005	<0.005					

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-30I (bg)	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
4/4/2019						<0.005	0.0029 (J)	
9/25/2019	<0.005	<0.005	<0.005					
9/26/2019				<0.005		<0.005	0.0019 (J)	
2/11/2020			<0.005					
2/12/2020	<0.005	<0.005						
3/19/2020	<0.005	<0.005	<0.005					
3/25/2020				<0.005			0.0024 (J)	
3/26/2020						<0.005		
9/23/2020		<0.005	<0.005			<0.005		
9/24/2020	<0.005			<0.005				
9/25/2020					0.32			
10/7/2020							<0.005	
2/9/2021					0.28	<0.005		
2/10/2021		<0.005	<0.005	<0.005			<0.005	
2/11/2021	<0.005							
3/1/2021	<0.005							
3/3/2021		<0.005	<0.005			<0.005		
3/4/2021				<0.005	0.27		<0.005	
8/19/2021	<0.005	<0.005						
8/25/2021					0.2			
8/27/2021			<0.005					
9/1/2021				0.0016 (J)		<0.005		
9/3/2021							<0.005	<0.005

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						1.2	1.8		
6/7/2016					4.4			<1	5.2
7/27/2016					4.7	1.7	1.9	0.08 (J)	
7/28/2016									5.1
9/16/2016					4.8		1.7		
9/19/2016						1.8		0.08 (J)	4.8
11/2/2016								0.1 (J)	
11/3/2016					5.3	0.69 (J)	1.9		5
1/11/2017					5.2	<1	1.7		
1/13/2017								<1	4.3
3/1/2017						1.8	<1		
3/2/2017					5				
3/6/2017								<1	4.5
4/26/2017						1.6	1.9	<1	4.9
5/2/2017					5				
6/28/2017						<1	<1		
6/29/2017					5.2			<1	5.5
10/3/2017									5.8
10/4/2017					5.3		1.7	<1	
10/5/2017						1.6			
6/5/2018									6.1
6/6/2018								0.049 (J)	
6/7/2018						0.68 (J)			
6/11/2018					5.2		0.95 (J)		
9/25/2018					6.1	1	1.5	0.13 (J)	7
10/16/2018	83.7								
4/2/2019					5.1				3.8
4/3/2019						0.82 (J)	1.3	0.12 (J)	
9/24/2019									1
9/25/2019					5.5			<1	
9/26/2019	46.6					0.64 (J)	1		
3/24/2020					5.4	<1	0.99 (J)	<1	3
3/25/2020	11.7								
9/23/2020		9.1	152		5.1	0.53 (J)	1.1		
9/24/2020	13.1			438				<1	3.6
3/3/2021	16.9	7.9	91.7		5.2	<1	1	<1	
3/4/2021				340					4.5
8/25/2021			164						
8/26/2021				338			1.2		
8/27/2021					5.3	0.59 (J)		<1	
9/1/2021	94.7	8.3							5

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			8	20	1.9				
6/7/2016						56			
7/26/2016			7.7	20	1.8				
7/28/2016						57			
8/30/2016									980
9/14/2016			7.5	19	1.8				
9/20/2016						68			
11/2/2016			8.2	20					
11/4/2016					2				
11/8/2016						79			
11/16/2016									940
1/12/2017				19	1.9				
1/13/2017			8.1						
1/16/2017						72			
2/27/2017									940
3/6/2017			8						
3/7/2017				20	2.1				
3/9/2017						69			
5/1/2017			8.4	20					
5/2/2017					2	60			
5/10/2017									1200
6/27/2017				18	2.1				
6/29/2017			9.2						
7/10/2017						57			
7/11/2017									1300
10/3/2017				16	2.3				
10/5/2017			9.6						
10/11/2017	20					52			
10/12/2017		17					940	400	1100
11/20/2017	24	71					980		
11/21/2017								430	
1/10/2018		66							
1/11/2018	23							390	
1/12/2018							880		
2/19/2018		57.2						414	
2/20/2018	20.6						905		
4/3/2018	24.5	49.4					872	406	
4/4/2018									1020
6/6/2018				8.3					
6/7/2018			8.5		2				
6/12/2018						41.4			
6/27/2018								357	
6/28/2018	22	43.8					869		
8/7/2018	20.7	40.5					879	346	
9/20/2018									810
9/24/2018	21.2	39.7					872	358	
9/26/2018			10.2	7.9	2.3				
9/27/2018						39.6			
3/26/2019		34.3							
3/27/2019	17.7						851		831
3/28/2019								258	
4/3/2019			8.5	7	2.1				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						27.9			
9/24/2019				5.5	2.4				
9/25/2019			8.5						
9/27/2019						30.3			
10/9/2019	15	27.9					708	263	725
3/24/2020		25.2		5.9	2.1				
3/25/2020	14.3		8.8				483	214	642
3/26/2020						36.5			
9/22/2020			8.2	5.5	2.1				
9/24/2020	11.7	22.9				52.5			579
9/25/2020							414	175	
3/2/2021				2.6	2.3				
3/3/2021			7.8						
3/4/2021	12	21.5				61.7 (M1)	356	117	537
8/25/2021						68			500
8/26/2021	19.2		8.5	6	2.4		328	117	
9/3/2021		21.3							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						5	4.2		
6/2/2016					6.6				1.3
7/25/2016							3.7		1.2
7/26/2016					6.1	5.4			
8/30/2016			160						
8/31/2016	34			29					
9/1/2016		95							
9/13/2016						2.9	5.2		
9/14/2016								9.4	
9/15/2016					6.1				
9/19/2016									1.2
11/1/2016						3.9			1.3
11/2/2016					6.3				
11/4/2016							5	13	
11/14/2016			150						
11/15/2016		94							
11/16/2016	240								
11/28/2016				36					
12/15/2016								1.8	
1/10/2017					5.9				
1/11/2017						3.7			
1/16/2017							7.9	11	<1
2/21/2017									1.4
2/22/2017				43					
2/24/2017	89		120						
2/27/2017		84							
3/2/2017						4.6	7.4		
3/3/2017								8.8	
3/8/2017					7				
4/26/2017					7				1.4
4/27/2017						5.2	7.4		
4/28/2017								10	
5/8/2017			120	60					
5/9/2017		91							
5/10/2017	100								
5/26/2017								12	
6/27/2017						5.9	6.4		
6/28/2017								11	
6/30/2017					6.5				<1
7/11/2017	110		110						
7/13/2017		88							
7/17/2017				63					
10/3/2017						6.6	5.9	7.9	
10/4/2017									1.4
10/5/2017					7.9				
10/10/2017			93						
10/11/2017		86							
10/12/2017	120								
10/16/2017				62					
2/19/2018				64.6					
4/2/2018			88.8						
4/4/2018	160	76.5							

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						6.4			
6/6/2018							4.4		
6/7/2018								8.8	
6/8/2018					6.4				
6/11/2018									1.1
8/6/2018				42.1					
9/19/2018			75						
9/20/2018	247	84.1							
10/1/2018					6.8	5.6	4	9.1	
10/2/2018									1
2/25/2019				42.1					
3/27/2019			65.9						
3/28/2019	181	82.8				8	4.3		
3/29/2019					7.3			9	
4/1/2019									0.96 (J)
6/12/2019				83.4					
9/24/2019						5.3	4.3	9.1	
9/25/2019					6.6				0.81 (J)
9/26/2019		80							
10/8/2019			52.3	128					
10/9/2019	279								
3/17/2020			71.6	98.6					
3/18/2020					8.1		5.3		
3/19/2020						10		12.4	1.6
3/25/2020	164	76.1							
9/22/2020			51.5	145					
9/23/2020						8.1	3.4	11.8	
9/24/2020		77							0.69 (J)
9/25/2020	281				6.1				
3/1/2021			51.6						0.88 (J)
3/2/2021				156	6				
3/3/2021						9	4.4	10.6	
3/4/2021	328	75.1							
8/19/2021			52.6		6.7	8.9	4.9		1
8/20/2021				121					
8/27/2021								16.7	
9/1/2021		79.8							
9/27/2021	56.5								

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		12					
6/2/2016	5.8						
6/8/2016					<1		
7/25/2016		8.4					
7/26/2016	6.7						
8/1/2016					1.1		
9/2/2016						72	
9/14/2016		8.6					
9/15/2016	6						
9/20/2016					0.38 (J)		
11/1/2016	4.9	8.9					
11/8/2016					0.39 (J)		
11/14/2016						110	
1/11/2017	4.5	8.6					
1/17/2017					<1		
2/28/2017						110	
3/1/2017		9.3					
3/2/2017	4.4						
3/8/2017					0.29 (J)		
4/26/2017	5.1	11					
5/2/2017					0.29 (J)		
5/9/2017						130	
6/28/2017	5.4	12					
7/7/2017					0.37 (J)		
7/13/2017						140	
9/22/2017						160	
9/29/2017						160	
10/4/2017	6.2	12					
10/5/2017					<1		
10/6/2017						160	
10/11/2017						150	
10/12/2017				650			
11/21/2017				700			
1/11/2018				590			
2/20/2018				677			
4/3/2018				615			
6/7/2018	6.7						
6/8/2018		9.6					
6/12/2018					0.35 (J)		
6/13/2018						144	
6/29/2018				634			
8/6/2018				623			
9/24/2018				674			
9/26/2018					0.28 (J)	160	
10/1/2018	7.1	9.1					
10/16/2018			34.2				
4/1/2019	7.2	8.5					
4/4/2019					0.29 (J)	119	
9/25/2019	7	13.8					
9/26/2019			14.3		0.23 (J)	84.8	
3/19/2020	9	12.9					
3/25/2020			36.1			58.8	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
3/26/2020					<1		
9/23/2020	6.9	16.8			<1		
9/24/2020			7.2				
9/25/2020				563			
10/7/2020						18.2	
3/3/2021	7	9.6			<1		
3/4/2021			8.8	485		6.3	
8/19/2021	7.5						
8/25/2021				472			
8/27/2021		18.2					
9/1/2021			38.7		<1		
9/3/2021						13.8	153

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						<0.001	<0.001		
6/7/2016					<0.001			<0.001	<0.001
7/27/2016					<0.001	<0.001	<0.001	<0.001	
7/28/2016									<0.001
9/16/2016					<0.001		<0.001		
9/19/2016						<0.001		<0.001	<0.001
11/2/2016								<0.001	
11/3/2016					<0.001	<0.001	<0.001		<0.001
1/11/2017					<0.001	<0.001	<0.001		
1/13/2017								<0.001	<0.001
3/1/2017						<0.001	<0.001		
3/2/2017					<0.001				
3/6/2017								<0.001	<0.001
4/26/2017						<0.001	<0.001	<0.001	<0.001
5/2/2017					<0.001				
6/28/2017						<0.001	<0.001		
6/29/2017					<0.001			<0.001	<0.001
3/28/2018					<0.001	<0.001	<0.001		
3/29/2018								<0.001	<0.001
9/25/2018									<0.001
3/5/2019					<0.001		<0.001	<0.001	<0.001
3/6/2019						<0.001			
4/2/2019					<0.001				<0.001
4/3/2019						<0.001	<0.001	<0.001	
9/24/2019									<0.001
9/25/2019					<0.001			<0.001	
9/26/2019	<0.001					<0.001	<0.001		
2/11/2020					<0.001	<0.001	<0.001		
2/12/2020								<0.001	<0.001
3/24/2020					<0.001	<0.001	<0.001	<0.001	<0.001
3/25/2020	<0.001								
9/23/2020		<0.001	<0.001		<0.001	<0.001	<0.001		
9/24/2020	<0.001			<0.001				<0.001	<0.001
2/9/2021	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			<0.001	<0.001	<0.001				
6/7/2016						<0.001			
7/26/2016			<0.001	<0.001	<0.001				
7/28/2016						<0.001			
8/30/2016									<0.001
9/14/2016			<0.001	<0.001	<0.001				
9/20/2016						<0.001			
11/2/2016			<0.001	<0.001					
11/4/2016					<0.001				
11/8/2016						<0.001			
11/16/2016									<0.001
1/12/2017				<0.001	<0.001				
1/13/2017			<0.001						
1/16/2017						<0.001			
2/27/2017									<0.001
3/6/2017			<0.001						
3/7/2017				<0.001	<0.001				
3/9/2017						<0.001			
5/1/2017			<0.001	<0.001					
5/2/2017					<0.001	<0.001			
5/10/2017									<0.001
6/27/2017				<0.001	<0.001				
6/29/2017			<0.001						
7/10/2017						<0.001			
7/11/2017									<0.001
10/11/2017	<0.001								
10/12/2017		<0.001					<0.001	<0.001	<0.001
11/20/2017	<0.001	<0.001					<0.001		
11/21/2017								<0.001	
1/10/2018		<0.001							
1/11/2018	<0.001							<0.001	
1/12/2018							<0.001		
2/19/2018		<0.001						<0.001	
2/20/2018	<0.001						<0.001		
3/29/2018			<0.001	<0.001	<0.001				
3/30/2018						<0.001			
4/3/2018	<0.001	<0.001					<0.001	<0.001	
4/4/2018									<0.001
6/27/2018								<0.001	
6/28/2018	<0.001	<0.001					<0.001		
8/7/2018	<0.001	<0.001					<0.001	<0.001	
9/20/2018									<0.001
9/24/2018	<0.001	<0.001					<0.001	<0.001	
3/4/2019			<0.001	<0.001	<0.001				
3/6/2019						<0.001			
4/3/2019			<0.001	<0.001	<0.001				
4/4/2019						<0.001			
8/21/2019	<0.001	<0.001							
8/22/2019							<0.001	<0.001	<0.001
9/24/2019				<0.001	<0.001				
9/25/2019			<0.001						
9/27/2019						<0.001			

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
2/12/2020	<0.001	<0.001	<0.001	<0.001	<0.001				
3/24/2020		<0.001		<0.001	<0.001				
3/25/2020	<0.001		<0.001				<0.001	<0.001	<0.001
3/26/2020						<0.001			
9/22/2020			<0.001	<0.001	<0.001				
9/24/2020	<0.001	<0.001				<0.001			<0.001
9/25/2020							<0.001	<0.001	
2/8/2021				<0.001	<0.001				
2/9/2021			<0.001			<0.001	<0.001		
2/10/2021	<0.001	<0.001						<0.001	<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (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		<0.001
7/26/2016					<0.001	<0.001			
8/30/2016			<0.001						
8/31/2016	<0.001			<0.001					
9/1/2016		<0.001							
9/13/2016						<0.001	<0.001		
9/14/2016								<0.001	
9/15/2016					<0.001				
9/19/2016									<0.001
11/1/2016						<0.001			<0.001
11/2/2016					<0.001				
11/4/2016							<0.001	<0.001	
11/14/2016			<0.001						
11/15/2016		<0.001							
11/16/2016	<0.001								
11/28/2016				<0.001					
12/15/2016								<0.001	
1/10/2017					<0.001				
1/11/2017						<0.001			
1/16/2017							<0.001	<0.001	<0.001
2/21/2017									<0.001
2/22/2017				<0.001					
2/24/2017	<0.001		<0.001						
2/27/2017		9E-05 (J)							
3/2/2017						<0.001	<0.001		
3/3/2017								<0.001	
3/8/2017					<0.001				
4/26/2017					<0.001				<0.001
4/27/2017						<0.001	<0.001		
4/28/2017								<0.001	
5/8/2017			<0.001	6E-05 (J)					
5/9/2017		<0.001							

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
5/10/2017	<0.001								
5/26/2017								<0.001	
6/27/2017						<0.001	<0.001		
6/28/2017								<0.001	
6/30/2017					<0.001				<0.001
7/11/2017	<0.001		<0.001						
7/13/2017		<0.001							
7/17/2017				6E-05 (J)					
10/10/2017			<0.001						
10/11/2017		<0.001							
10/12/2017	<0.001								
10/16/2017				7E-05 (J)					
2/19/2018				<0.001					
3/27/2018					<0.001		<0.001		<0.001
3/28/2018								<0.001	
3/29/2018						<0.001			
4/2/2018			<0.001						
4/4/2018	<0.001	<0.001							
8/6/2018				<0.001					
9/19/2018			<0.001						
9/20/2018	<0.001	<0.001							
2/25/2019				<0.001					
2/26/2019					<0.001				<0.001
2/27/2019						<0.001	<0.001	<0.001	
6/12/2019				<0.001					
8/19/2019				5.5E-05 (J)					
8/20/2019			5.8E-05 (J)						
8/21/2019	<0.001								
9/26/2019		<0.001							
10/8/2019			8.4E-05 (J)	<0.001					
2/10/2020						<0.001	5.5E-05 (J)		
2/11/2020								<0.001	
2/12/2020					8.9E-05 (J)				<0.001
3/17/2020			<0.001	<0.001					
3/18/2020					<0.001		<0.001		
3/19/2020						<0.001		<0.001	<0.001
3/25/2020	<0.001	<0.001							
8/26/2020				<0.001					
8/27/2020			<0.001						
9/22/2020				<0.001					
9/23/2020						<0.001	<0.001	<0.001	
9/24/2020		<0.001							<0.001
9/25/2020	<0.001				<0.001				
2/9/2021	<0.001	<0.001							
2/10/2021					<0.001			<0.001	
2/11/2021									<0.001
2/12/2021						<0.001	<0.001		
3/2/2021				<0.001					
8/19/2021			<0.001						
8/20/2021				<0.001					

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/1/2016		<0.001				
6/2/2016	<0.001					
6/8/2016					<0.001	
7/25/2016		<0.001				
7/26/2016	0.0001 (J)					
8/1/2016					<0.001	
9/2/2016						<0.001
9/14/2016		<0.001				
9/15/2016	<0.001					
9/20/2016					<0.001	
11/1/2016	<0.001	<0.001				
11/8/2016					<0.001	
11/14/2016						<0.001
1/11/2017	<0.001	<0.001				
1/17/2017					<0.001	
2/28/2017						<0.001
3/1/2017		<0.001				
3/2/2017	<0.001					
3/8/2017					<0.001	
4/26/2017	<0.001	<0.001				
5/2/2017					<0.001	
5/9/2017						<0.001
6/28/2017	<0.001	<0.001				
7/7/2017					<0.001	
7/13/2017						<0.001
9/22/2017						<0.001
9/29/2017						<0.001
10/6/2017						<0.001
10/12/2017				<0.001		
11/21/2017				<0.001		
1/11/2018				<0.001		
2/20/2018				<0.001		
3/28/2018	<0.001	<0.001				
3/30/2018					<0.001	<0.001
4/3/2018				<0.001		
6/29/2018				<0.001		
8/6/2018				<0.001		
9/24/2018				<0.001		
2/27/2019	<0.001	<0.001				
3/5/2019					<0.001	
3/6/2019						<0.001
4/4/2019					<0.001	<0.001
9/26/2019			<0.001		<0.001	<0.001
2/11/2020		<0.001				
2/12/2020	<0.001					
3/19/2020	<0.001	<0.001				
3/25/2020			<0.001			<0.001
3/26/2020					<0.001	
9/23/2020	<0.001	0.00016 (J)			<0.001	
9/24/2020			<0.001			
9/25/2020				<0.001		
10/7/2020						<0.001

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/9/2021				<0.001	<0.001	
2/10/2021	<0.001	<0.001	<0.001			<0.001

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWA-17S (bg)	YGWA-18I (bg)	YGWA-18S (bg)	YGWA-20S (bg)	YGWA-21I (bg)
6/6/2016						120	58		
6/7/2016					28			38	60
7/27/2016					74	94	35	74	
7/28/2016									81
9/16/2016					67		35		
9/19/2016						92		45	68
11/2/2016								53	
11/3/2016					41	104	48		61
1/11/2017					104	133	95		
1/13/2017								46	76
3/1/2017						119	79		
3/2/2017					77				
3/6/2017								164	167
4/26/2017						162	36	34	50
5/2/2017					142				
6/28/2017						98	45		
6/29/2017					53			68	94
10/3/2017									149
10/4/2017					61		45	54	
10/5/2017						104			
6/5/2018									109
6/6/2018								79	
6/7/2018						68			
6/11/2018					70		74		
9/25/2018					86	109	63	73	122
10/16/2018	209								
4/2/2019					72				134
4/3/2019						89	63	57	
9/24/2019									157
9/25/2019					81			75	
9/26/2019						126	72		
3/24/2020					71	91	59	76	117
3/25/2020	139								
9/23/2020		62	329		99	103	81		
9/24/2020	106			788				69	113
3/3/2021	121	40	245		57	95	37	53	
3/4/2021				604					110
8/25/2021			332						
8/26/2021				570			31		
8/27/2021					93	112		67	
9/1/2021	219	60							137

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/2/2016			96	160	66				
6/7/2016						130			
7/26/2016			92	177	78				
7/28/2016						119			
8/30/2016									1650
9/14/2016			102	187	73				
9/20/2016						132			
11/2/2016			115	181					
11/4/2016					75				
11/8/2016						146			
11/16/2016									1420
1/12/2017				202	86				
1/13/2017			67						
1/16/2017						194			
2/27/2017									1640
3/6/2017			159						
3/7/2017				257	108				
3/9/2017						288			
5/1/2017			107	165					
5/2/2017					103	221			
5/10/2017									1630
6/27/2017				189	73				
6/29/2017			79						
7/10/2017						123			
7/11/2017									1800
10/3/2017				170	89				
10/5/2017			95						
10/11/2017	68					100			
10/12/2017		74					1360	636	1600
11/20/2017	139	179					1390		
11/21/2017								706	
1/10/2018		140							
1/11/2018	153							701	
1/12/2018							1400		
2/19/2018		119						630	
2/20/2018	87						1300		
4/3/2018	85	106					1390	660	
4/4/2018									1520
6/6/2018				151					
6/7/2018			90		142				
6/12/2018						115			
6/27/2018								575	
6/28/2018	88	112					1310		
8/7/2018	89	103					1340	574	
9/20/2018									1240
9/24/2018	82	107					1400	588	
9/26/2018			116	144	86				
9/27/2018						105			
3/26/2019		90							
3/27/2019	75						1190		1100
3/28/2019								372	
4/3/2019			111	142	83				

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-39 (bg)	YGWA-40 (bg)	YGWA-4I (bg)	YGWA-5D (bg)	YGWA-5I (bg)	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
4/4/2019						85			
9/24/2019				129	79				
9/25/2019			117						
9/27/2019						96			
10/9/2019	119	98					1100	440	1170
3/24/2020		84		139	68				
3/25/2020	158		146				883	428	1200
3/26/2020						110			
9/22/2020			83	104	75				
9/24/2020	170	77				129			1060
9/25/2020							664	307	
3/2/2021				52	67				
3/3/2021			80						
3/4/2021	168	57				96	600	224	501
8/25/2021						141			886
8/26/2021	249		93	123	86		562	225	
9/3/2021		88							

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/1/2016						120	54		
6/2/2016					46				36
7/25/2016							48		50
7/26/2016					54	94			
8/30/2016			319						
8/31/2016	80			209					
9/1/2016		228							
9/13/2016						105	67		
9/14/2016								152	
9/15/2016					54				
9/19/2016									35
11/1/2016						44			<25
11/2/2016					71				
11/4/2016							60	148	
11/14/2016			280						
11/15/2016		211							
11/16/2016	112								
11/28/2016				102					
12/15/2016								191	
1/10/2017					45				
1/11/2017						107			
1/16/2017							65	180	47
2/21/2017									<25
2/22/2017				164					
2/24/2017	147		162						
2/27/2017		382							
3/2/2017						98	61		
3/3/2017								156	
3/8/2017					178				
4/26/2017					52				55
4/27/2017						116	31		
4/28/2017								130	
5/8/2017			194	145					
5/9/2017		154							
5/10/2017	203								
5/26/2017								223	
6/27/2017						89	42		
6/28/2017								166	
6/30/2017					45				42
7/11/2017	238		193						
7/13/2017		192							
7/17/2017				185					
10/3/2017						119	58	153	
10/4/2017									31
10/5/2017					40				
10/10/2017			175						
10/11/2017		177							
10/12/2017	287								
10/16/2017				218					
2/19/2018				173					
4/2/2018			192						
4/4/2018	292	174							

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	YGWA-47 (bg)	GWA-2 (bg)	YGWA-14S (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-2I (bg)	YGWA-30I (bg)
6/5/2018						127			
6/6/2018							96		
6/7/2018								146	
6/8/2018					114				
6/11/2018									59
8/6/2018				158					
9/19/2018			186						
9/20/2018	434	186							
10/1/2018					50	117	60	155	
10/2/2018									57
2/25/2019				92					
3/27/2019			170						
3/28/2019	323	164				87	87		
3/29/2019					63			150	
4/1/2019									54
6/12/2019				226					
9/24/2019						124	54	146	
9/25/2019					64				51
9/26/2019		192							
10/8/2019			172	276					
10/9/2019	501								
3/17/2020			165	185					
3/18/2020					57		35		
3/19/2020						116		148	47
3/25/2020	352	130							
9/22/2020			141	281					
9/23/2020						108	15	161	
9/24/2020		187							51
9/25/2020	494				54				
3/1/2021			145						23
3/2/2021				296	67				
3/3/2021						99	39	138	
3/4/2021	592	145							
8/19/2021			134		54	105	44		50
8/20/2021				254					
8/27/2021								150	
9/1/2021		163							
9/27/2021	158								

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/6/2022 12:02 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
6/1/2016		150					
6/2/2016	130						
6/8/2016					66		
7/25/2016		135					
7/26/2016	141						
8/1/2016					56		
9/2/2016						243	
9/14/2016		127					
9/15/2016	153						
9/20/2016					53		
11/1/2016	92	75					
11/8/2016					58		
11/14/2016						272	
1/11/2017	159	148					
1/17/2017					56		
2/28/2017						306	
3/1/2017		182					
3/2/2017	117						
3/8/2017					192		
4/26/2017	181	92					
5/2/2017					113		
5/9/2017						303	
6/28/2017	169	126					
7/7/2017					46		
7/13/2017						282	
9/22/2017						309	
9/29/2017						273	
10/4/2017	141	147					
10/5/2017					48		
10/6/2017						287	
10/11/2017						264	
10/12/2017				1060			
11/21/2017				1100			
1/11/2018				1020			
2/20/2018				1050			
4/3/2018				1080			
6/7/2018	95						
6/8/2018		158					
6/12/2018					79		
6/13/2018						292	
6/29/2018				979			
8/6/2018				1020			
9/24/2018				1090			
9/26/2018					59	277	
10/1/2018	165	138					
10/16/2018			123				
4/1/2019	149	19 (J)					
4/4/2019					63	240	
9/25/2019	157	159					
9/26/2019					81	198	
3/19/2020	146	148					
3/25/2020			84			164	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/6/2022 12:02 PM

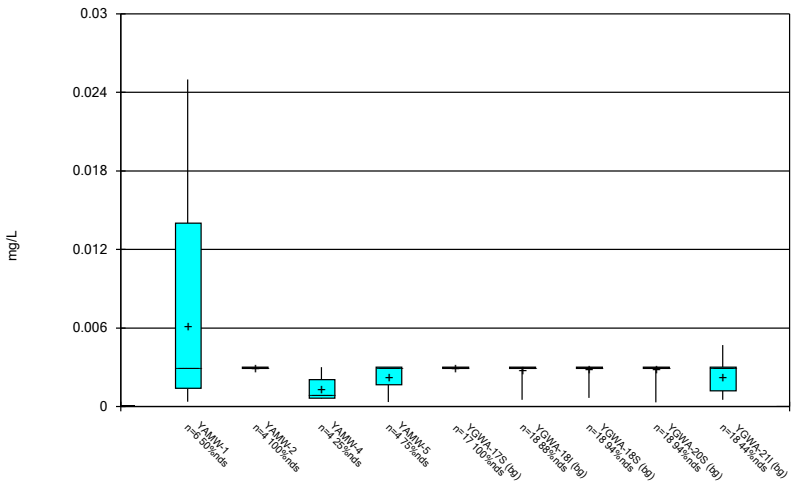
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3D (bg)	YGWA-3I (bg)	PZ-35	PZ-37	YGWC-24SA	YGWC-36A	PZ-37D
3/26/2020					67		
9/23/2020	157	155			87		
9/24/2020			100				
9/25/2020				878			
10/7/2020						137	
3/3/2021	137	111			70		
3/4/2021			59	856		69	
8/19/2021	144						
8/25/2021				876			
8/27/2021		155					
9/1/2021			128		96		
9/3/2021						89	374

FIGURE B.

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

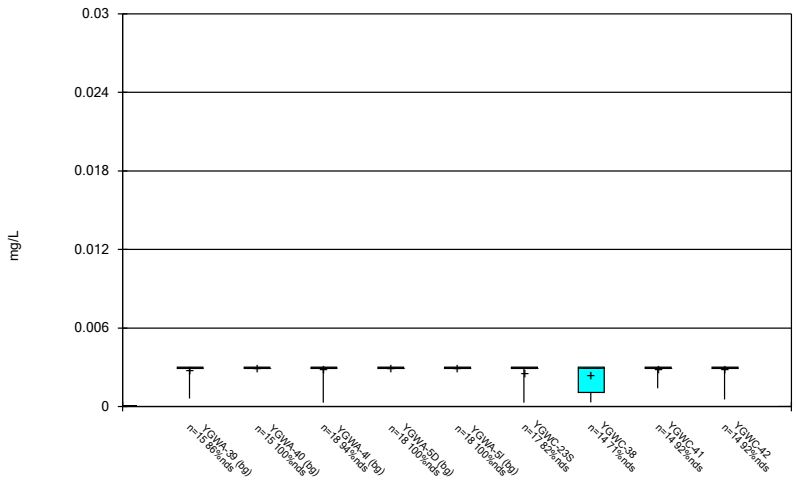


Constituent: Antimony Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

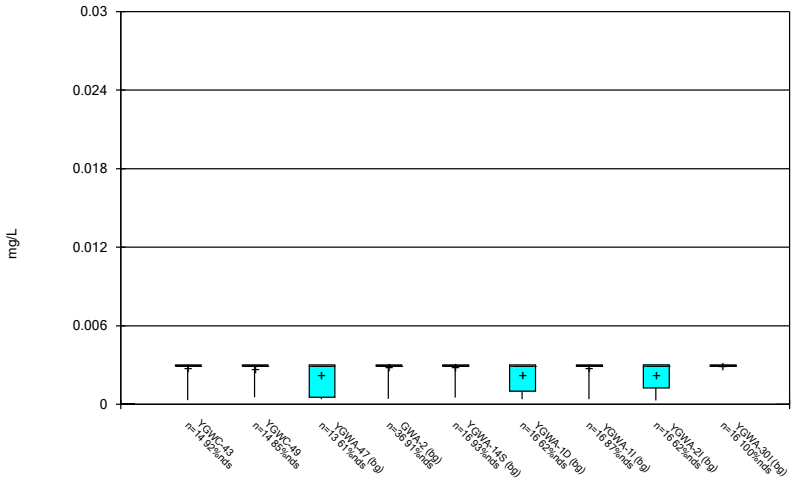


Constituent: Antimony Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

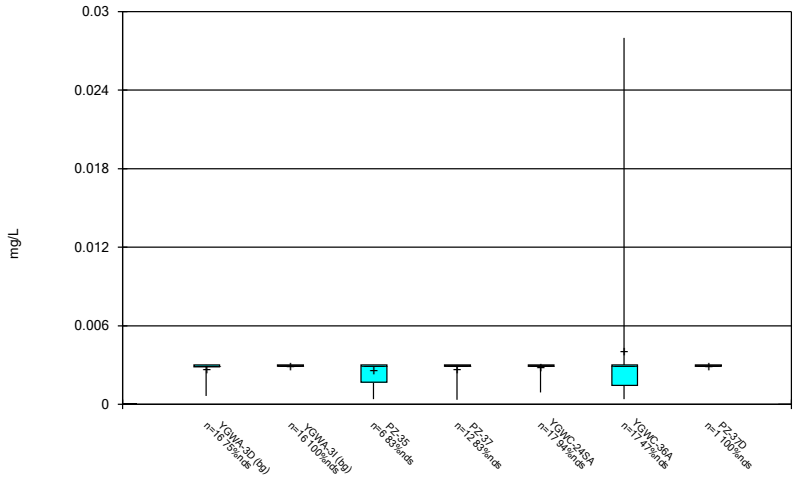


Constituent: Antimony Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

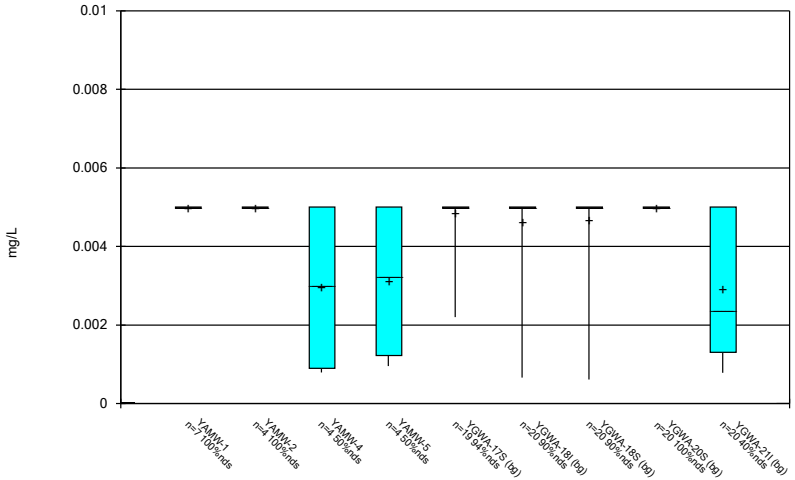
Box & Whiskers Plot



Constituent: Antimony Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

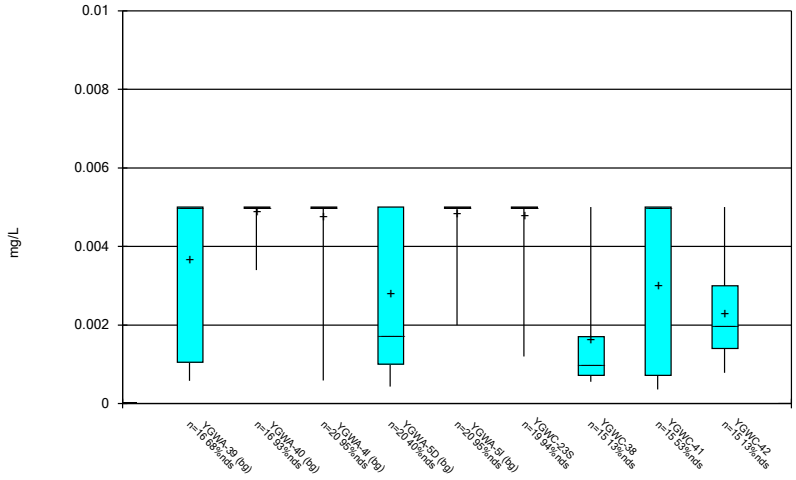


Constituent: Arsenic Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

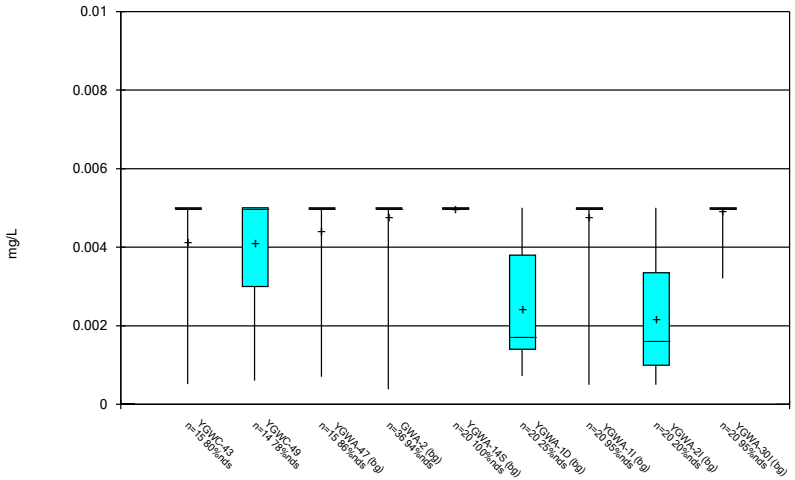


Constituent: Arsenic Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

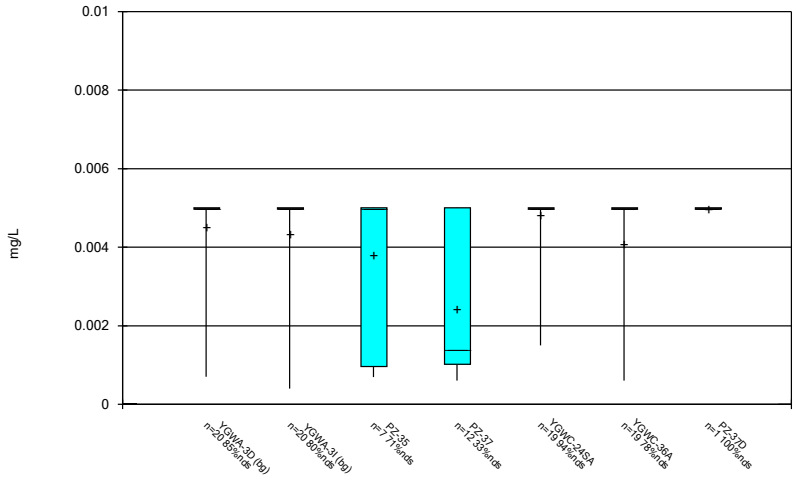


Constituent: Arsenic Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

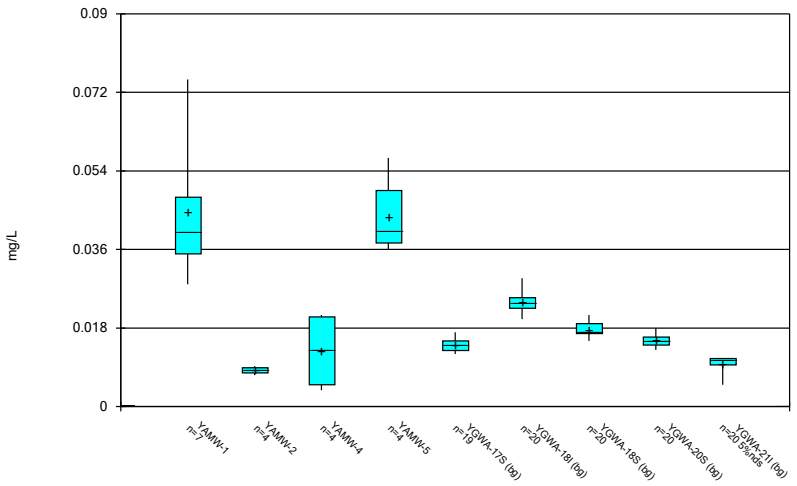
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

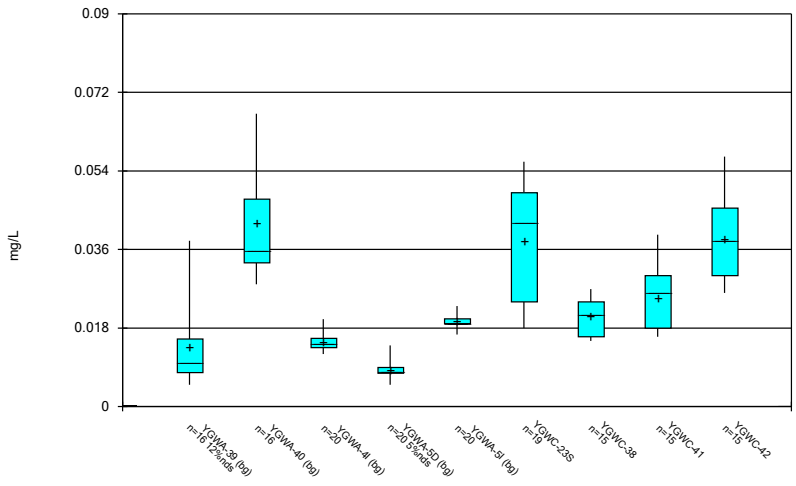


Constituent: Barium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

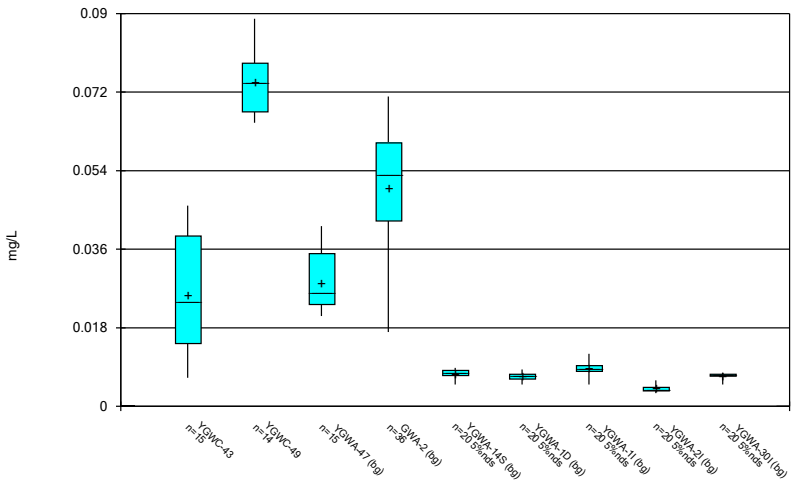


Constituent: Barium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

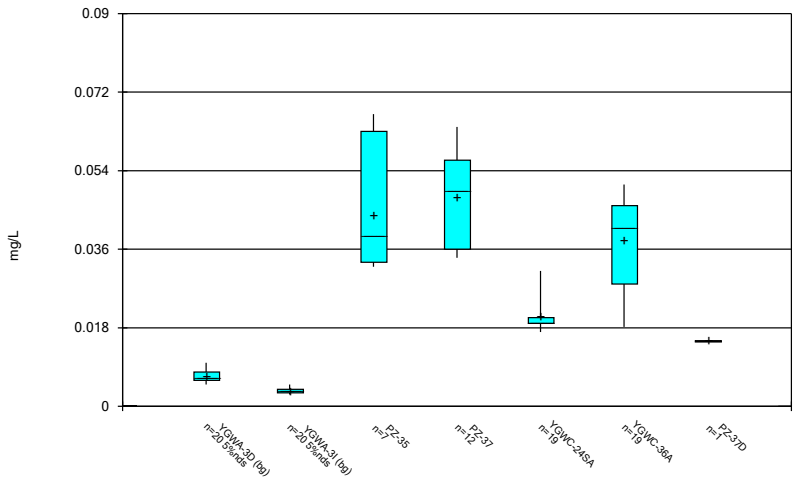


Constituent: Barium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

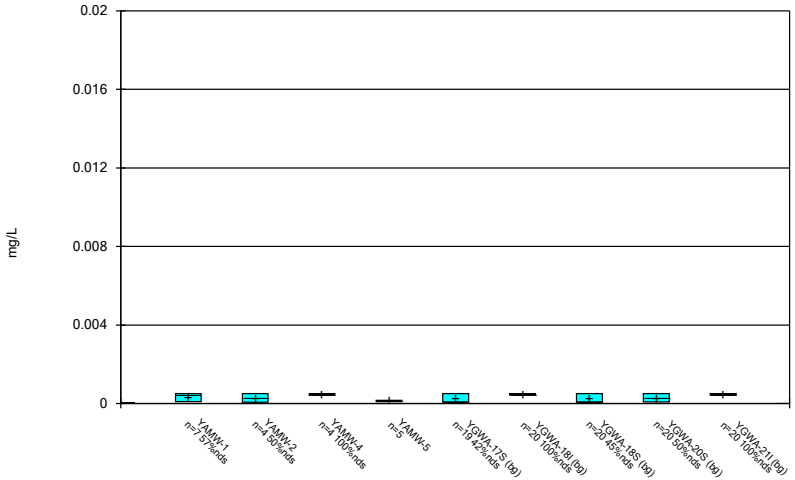
Box & Whiskers Plot



Constituent: Barium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

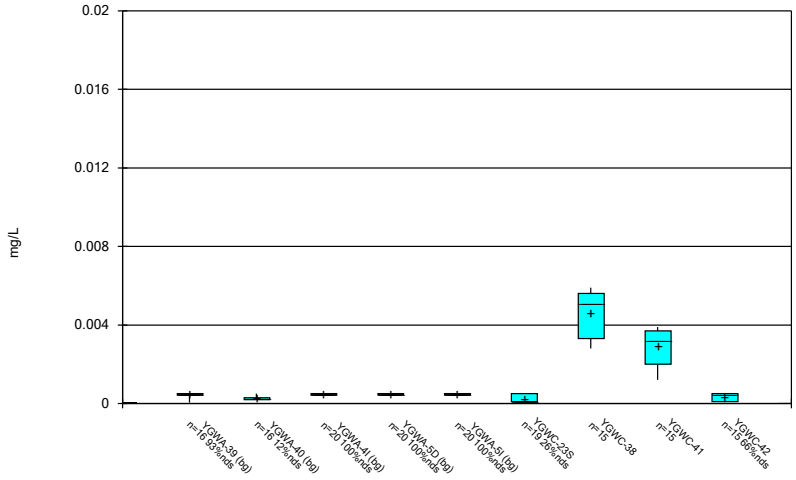


Constituent: Beryllium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

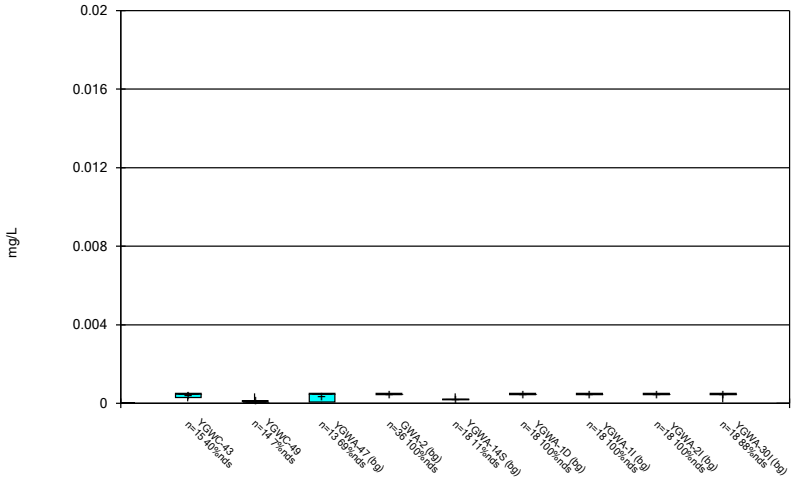


Constituent: Beryllium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

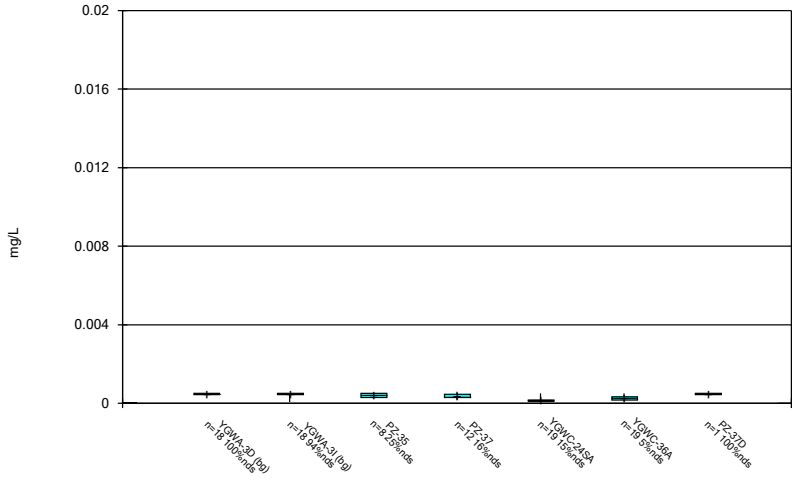


Constituent: Beryllium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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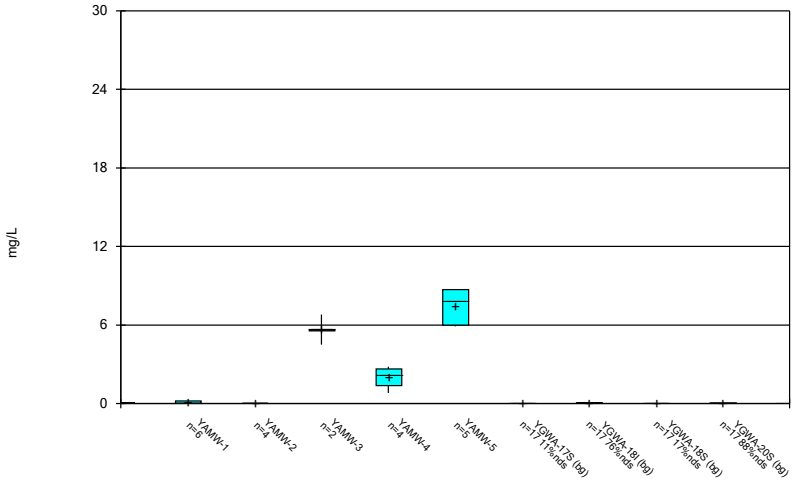
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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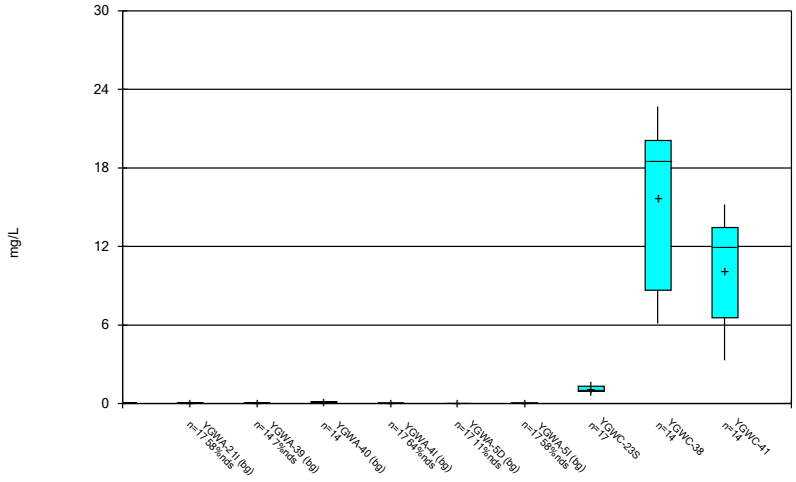
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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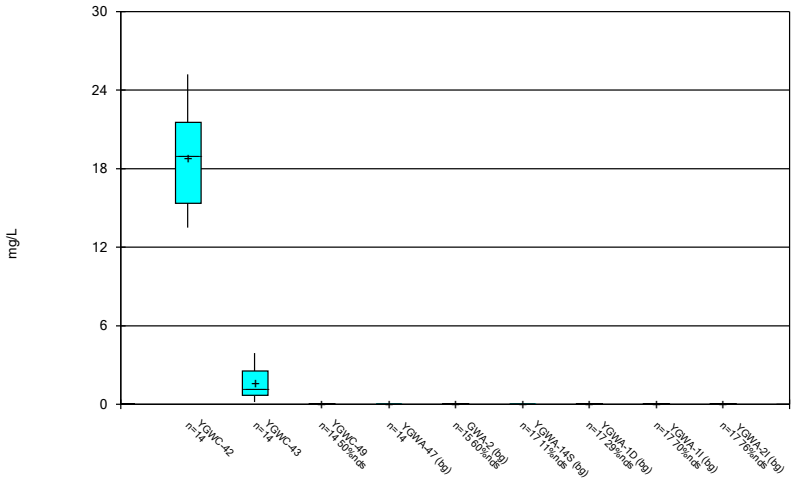
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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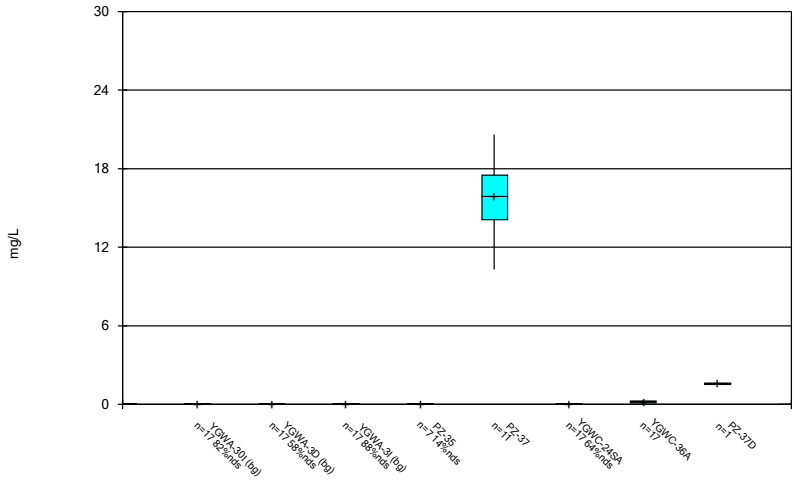
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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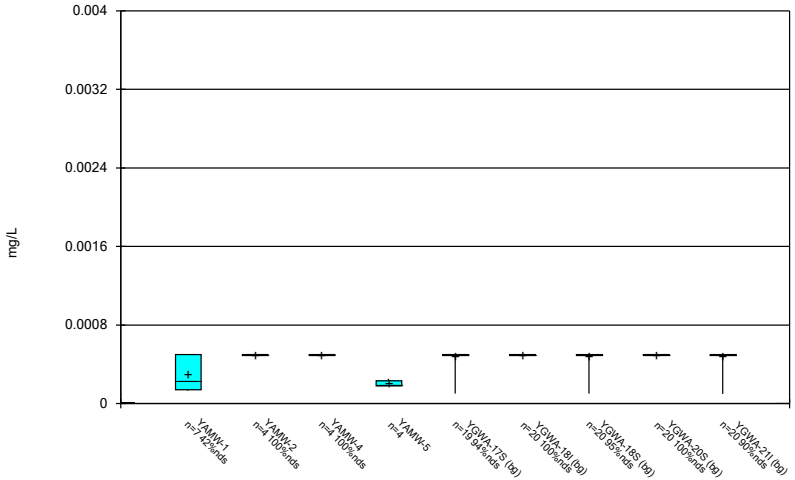
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

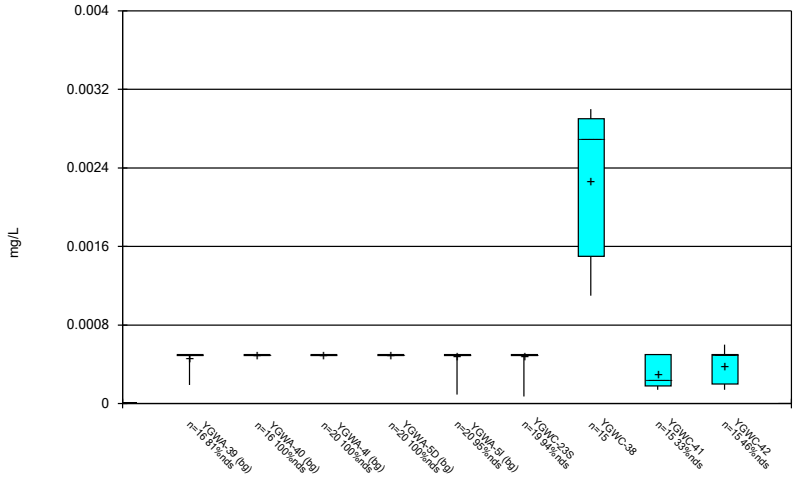


Constituent: Cadmium Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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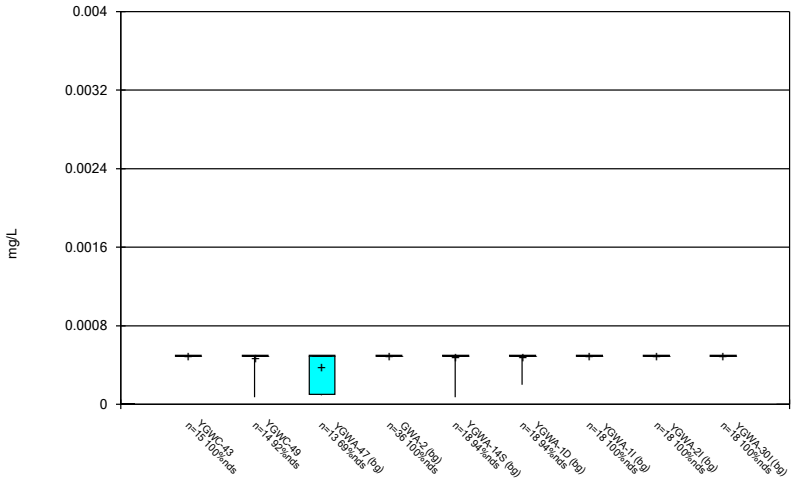
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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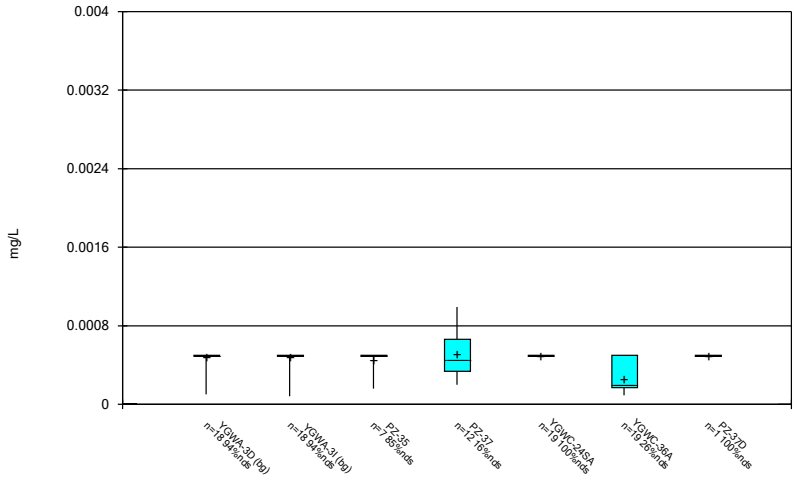
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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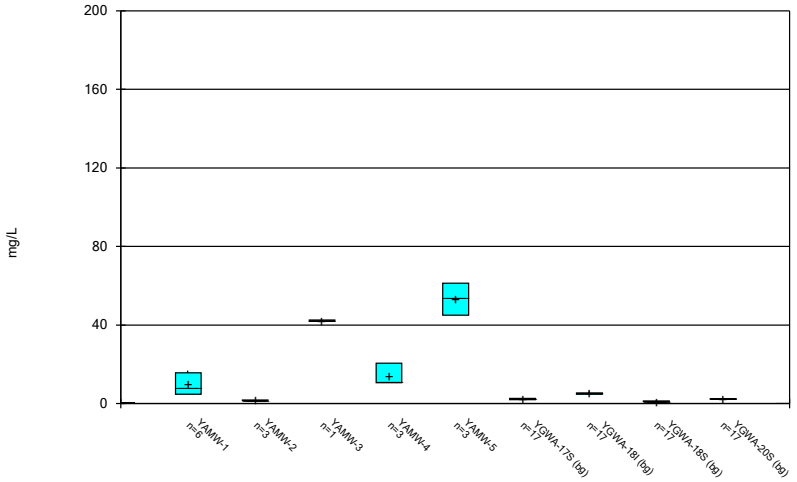
Box & Whiskers Plot



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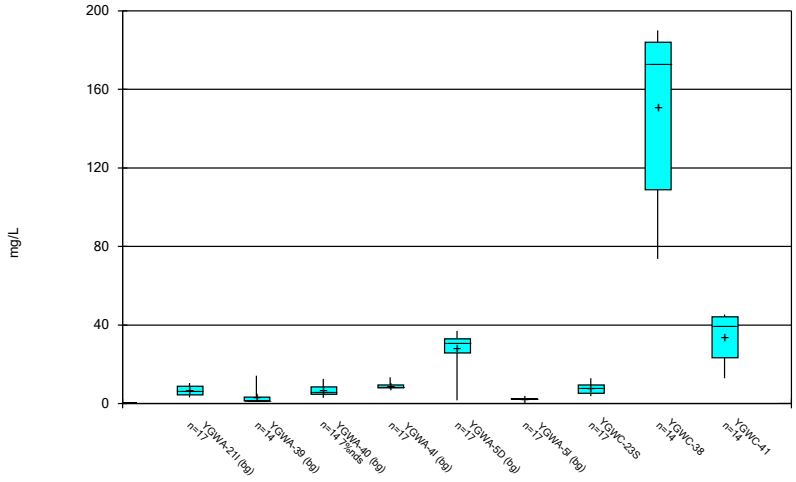
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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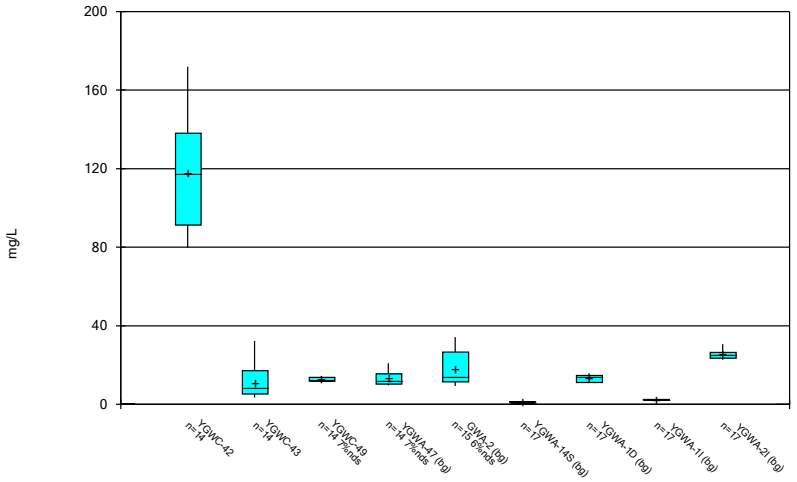
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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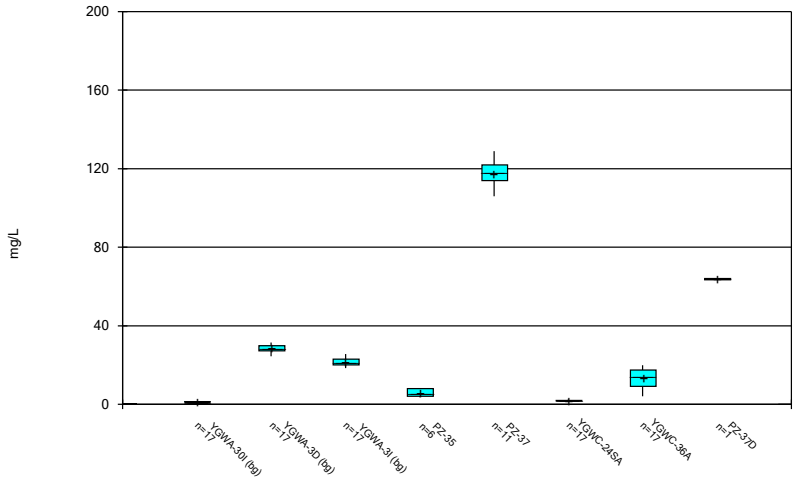
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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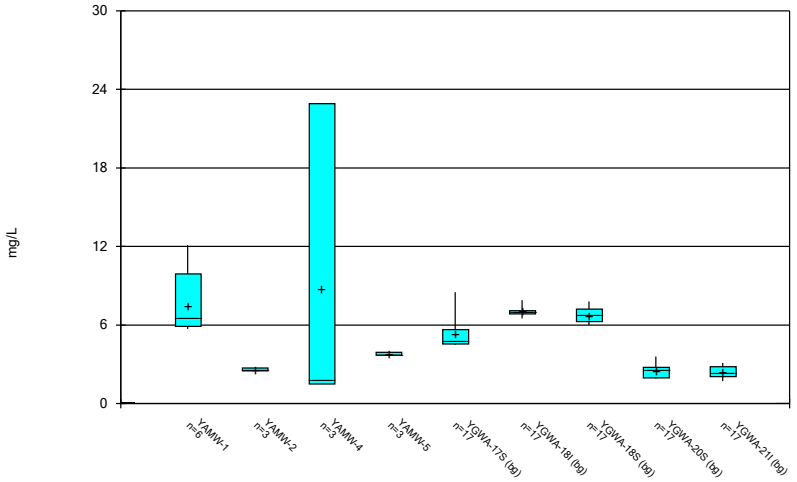
Box & Whiskers Plot



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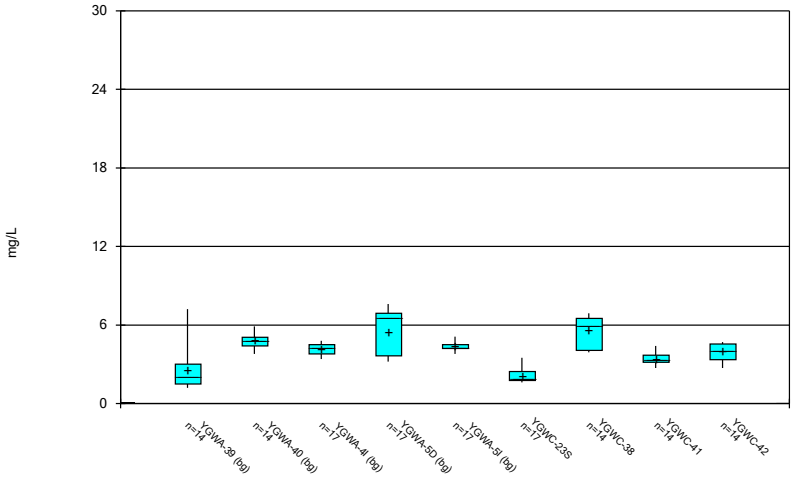
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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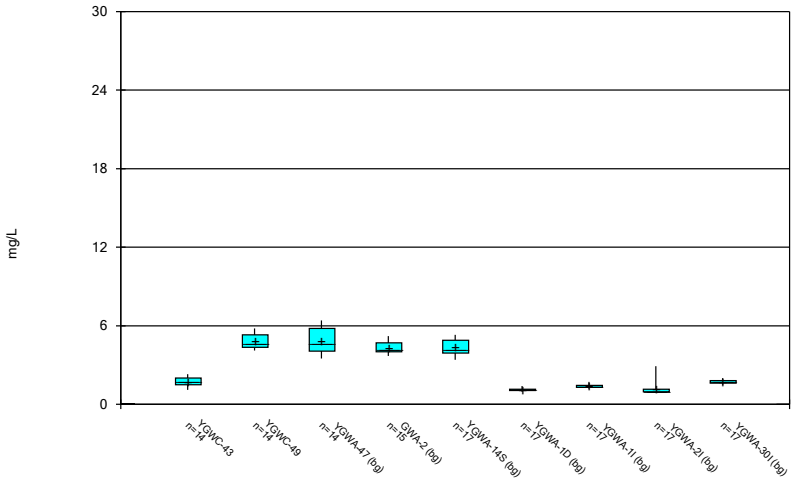
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

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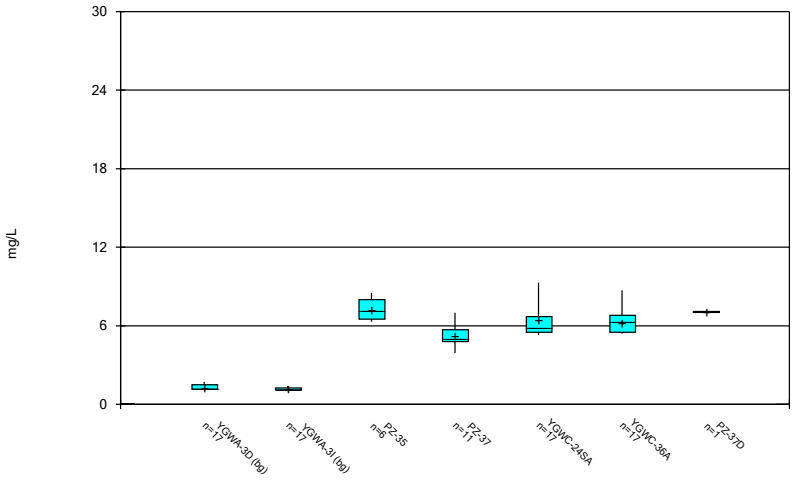

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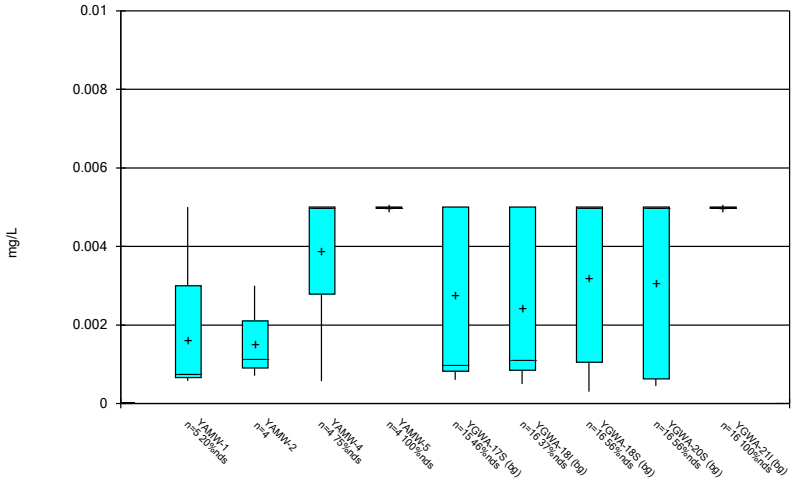
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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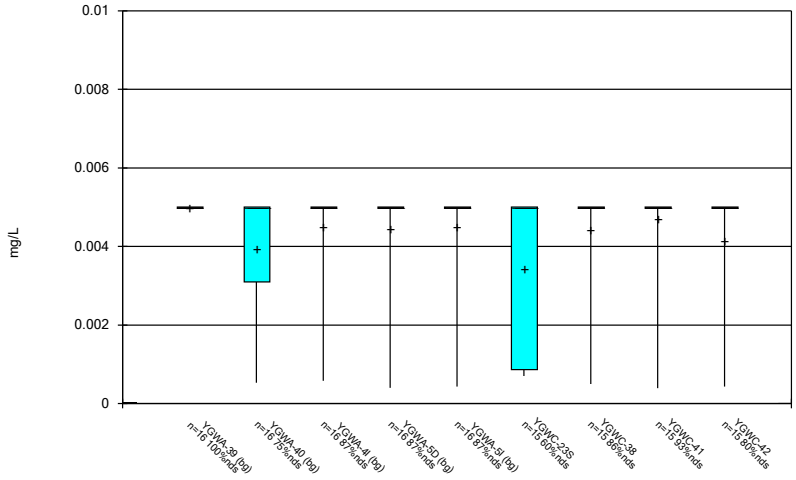
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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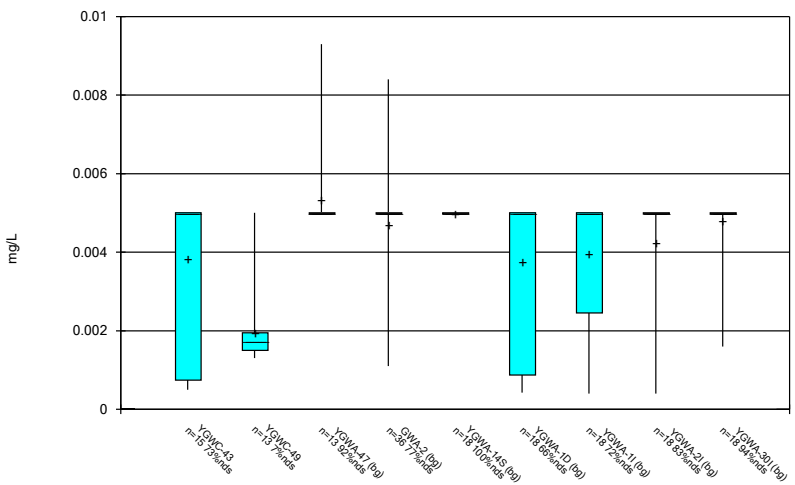
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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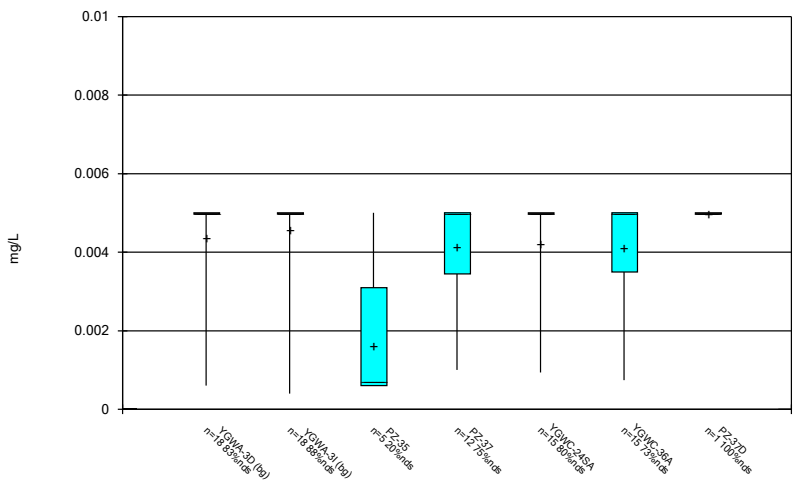
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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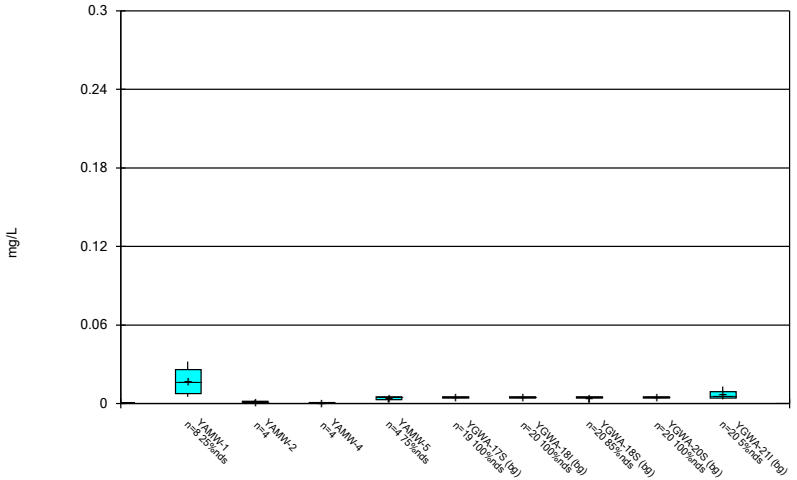
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

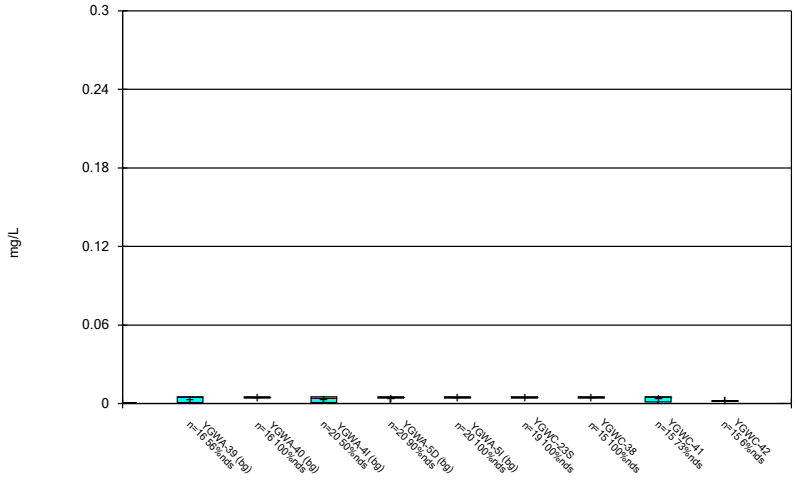


Constituent: Cobalt Analysis Run 1/6/2022 12:04 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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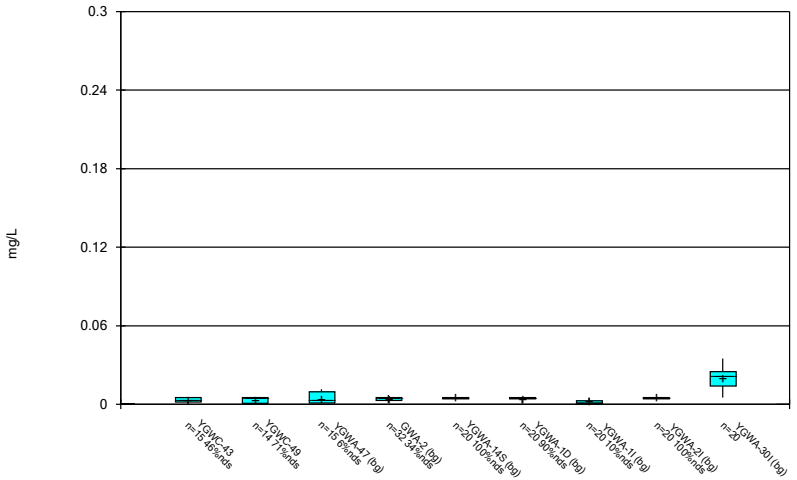
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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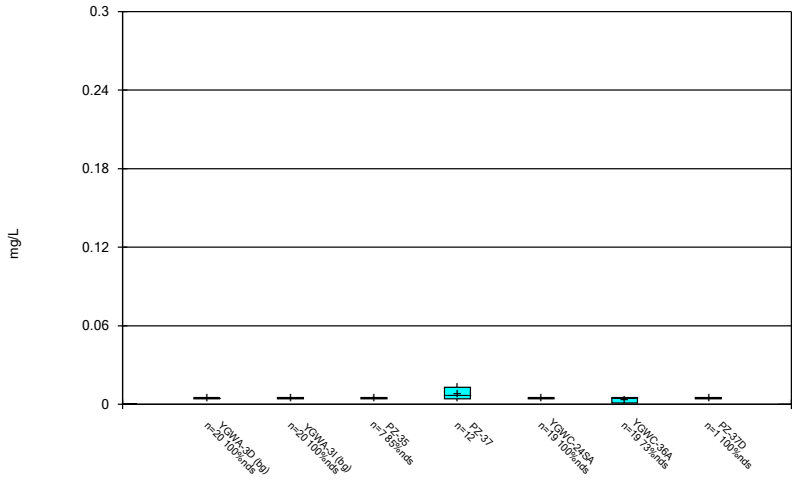
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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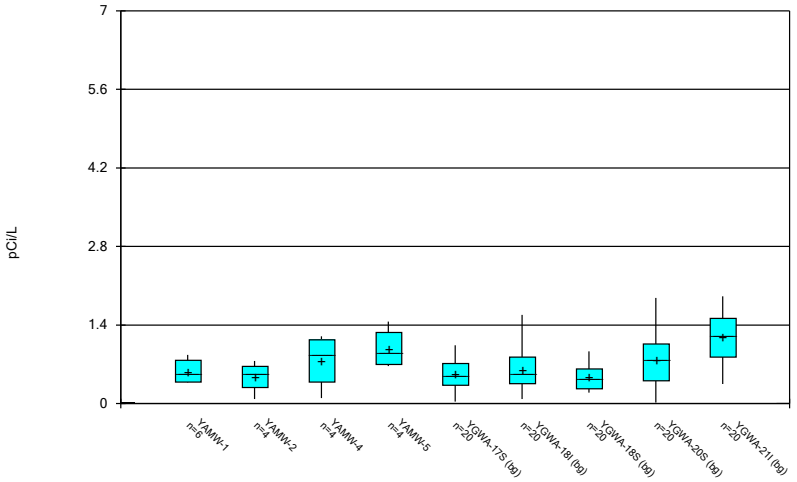
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

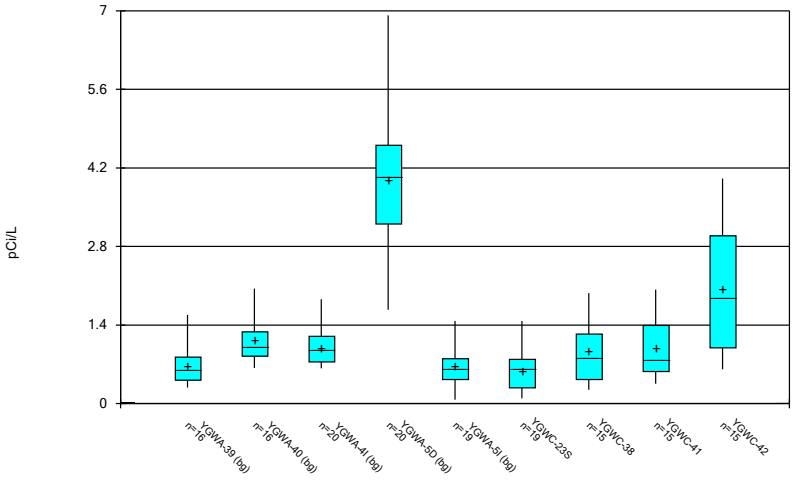
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/6/2022 12:04 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

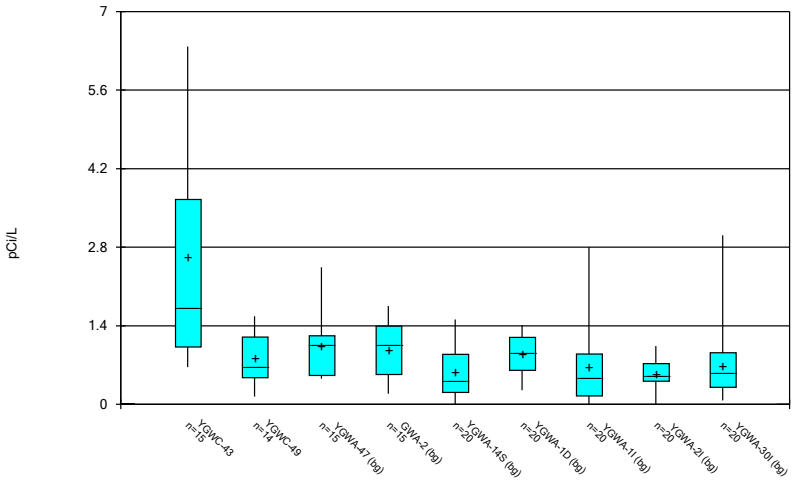
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/6/2022 12:05 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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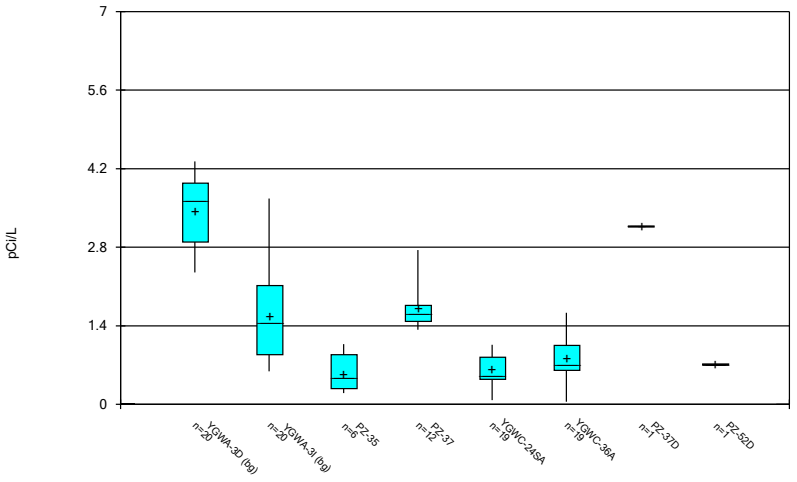
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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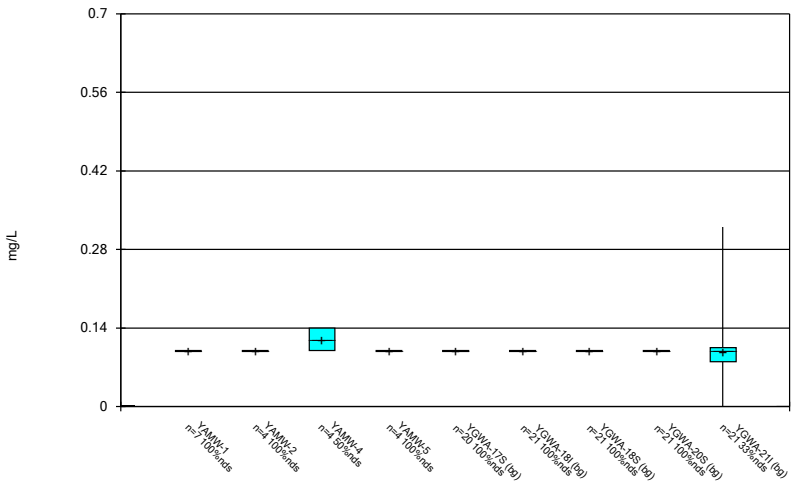
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

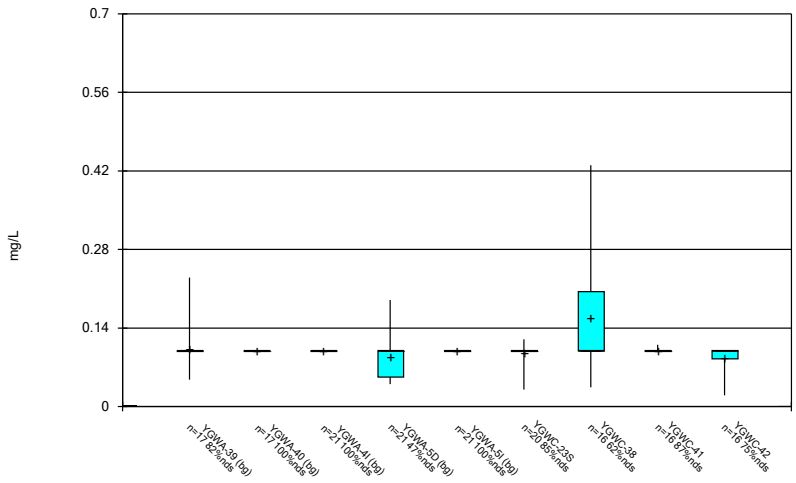


Constituent: Fluoride Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

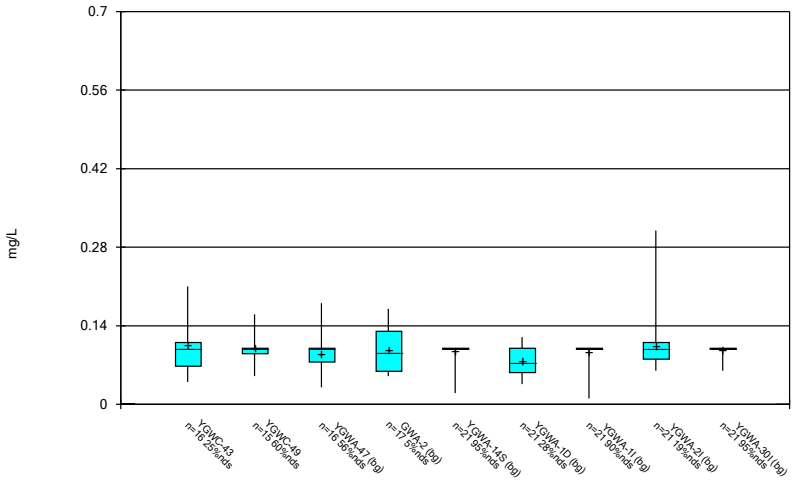


Constituent: Fluoride Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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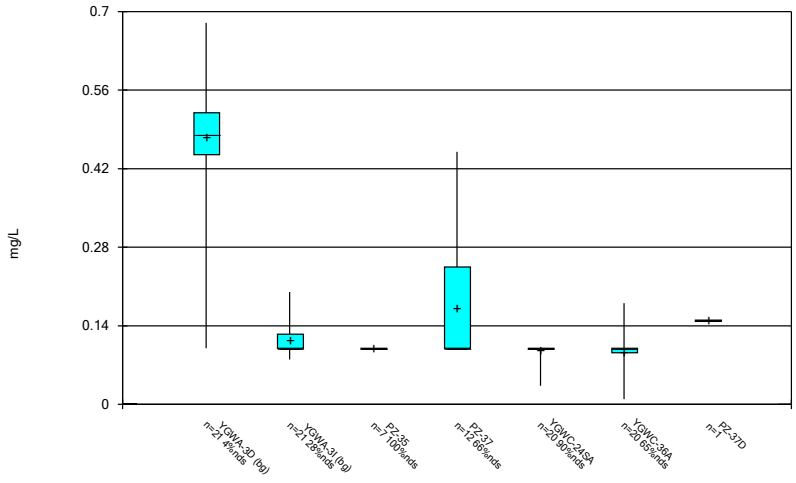
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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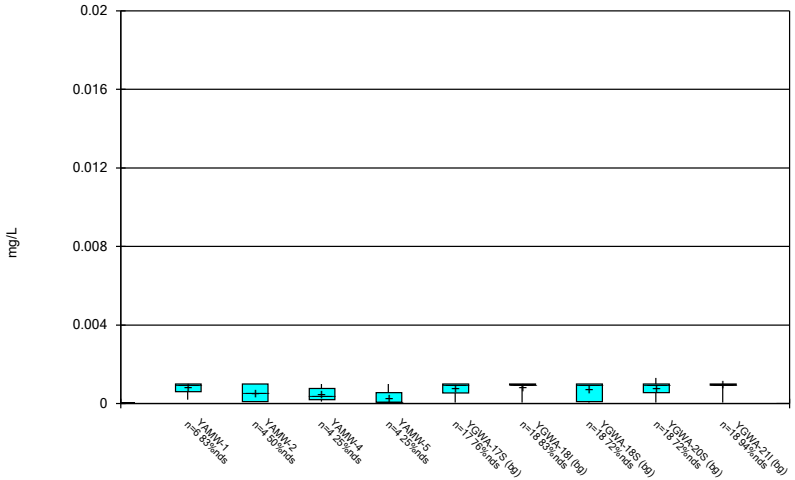
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

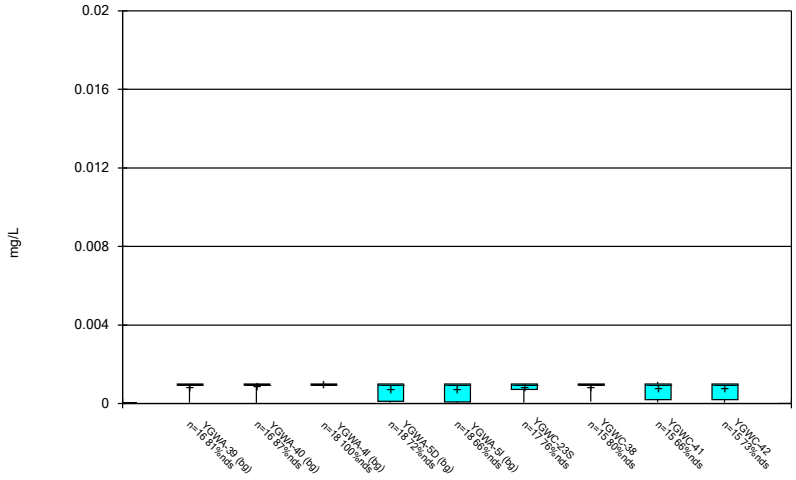


Constituent: Lead Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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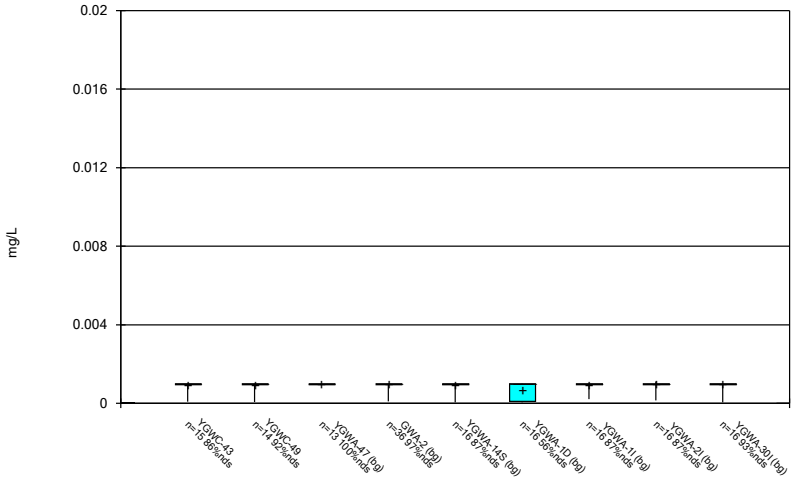
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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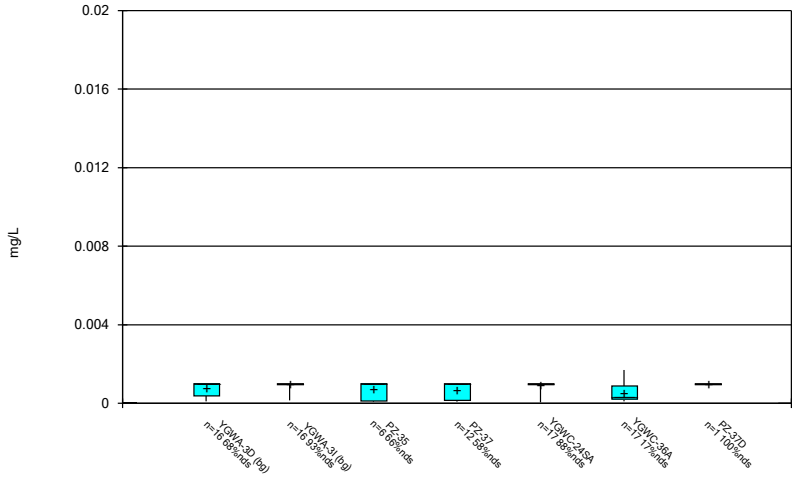
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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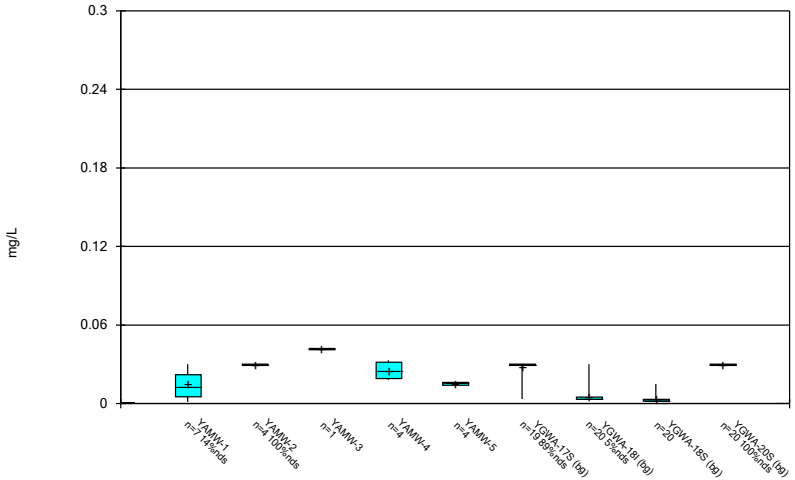
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

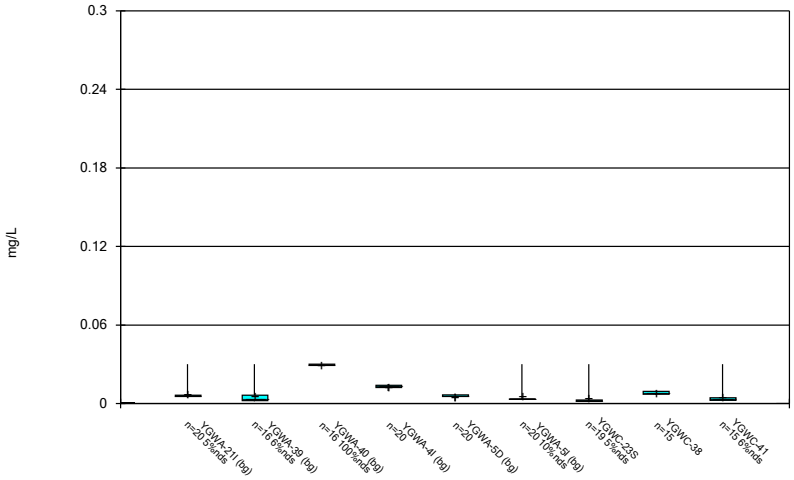


Constituent: Lithium Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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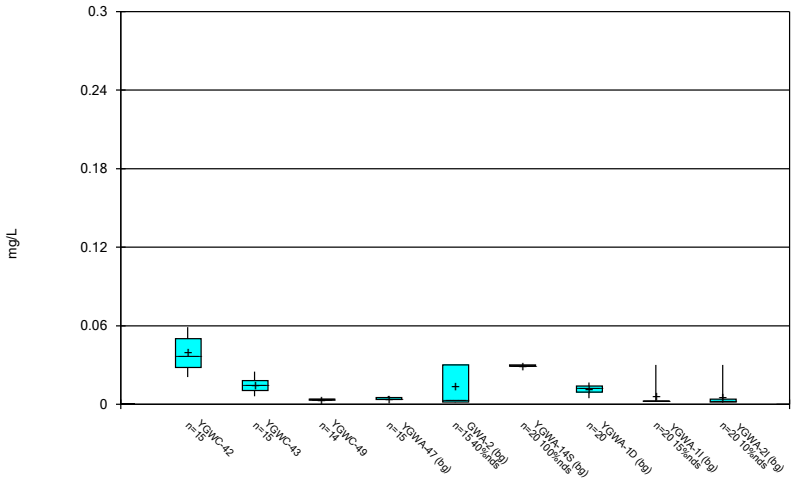
Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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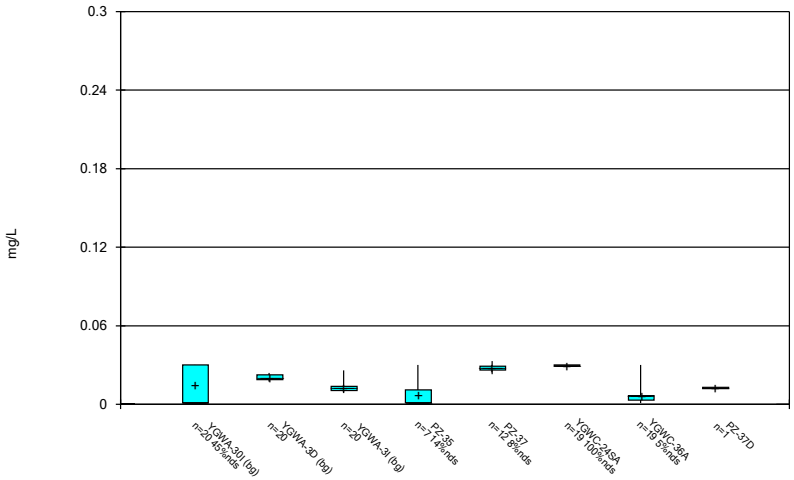

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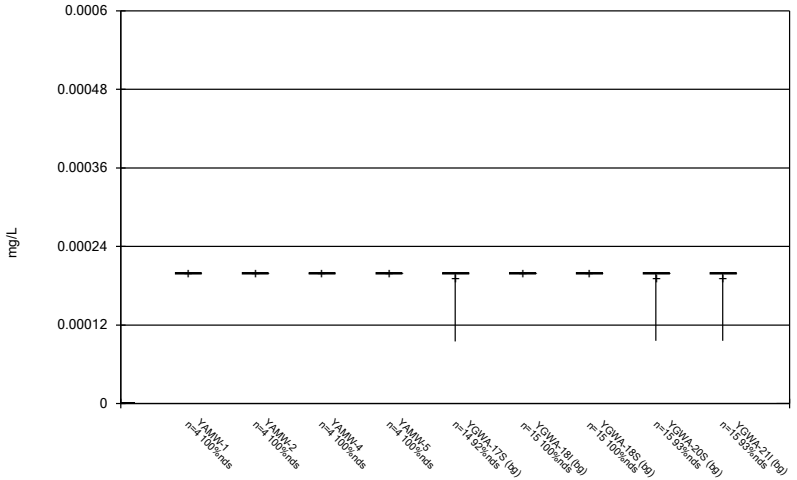
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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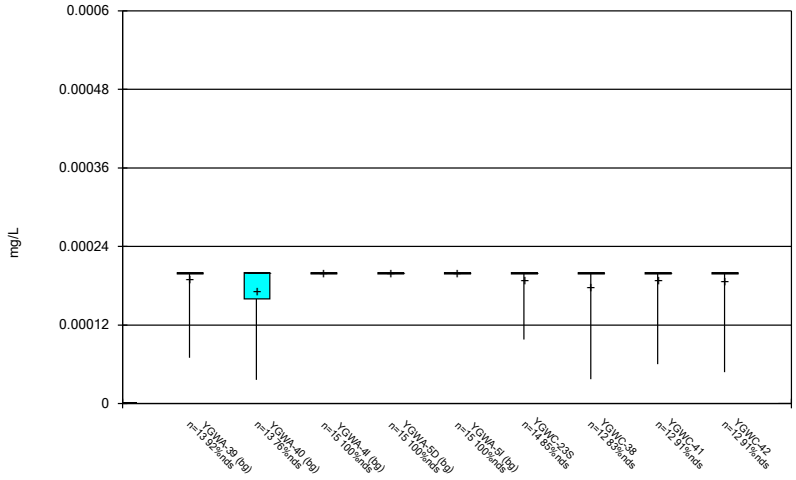
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

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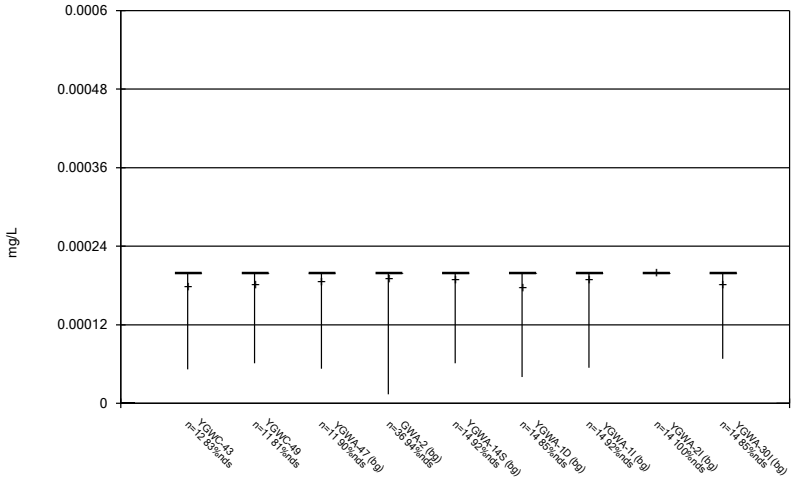

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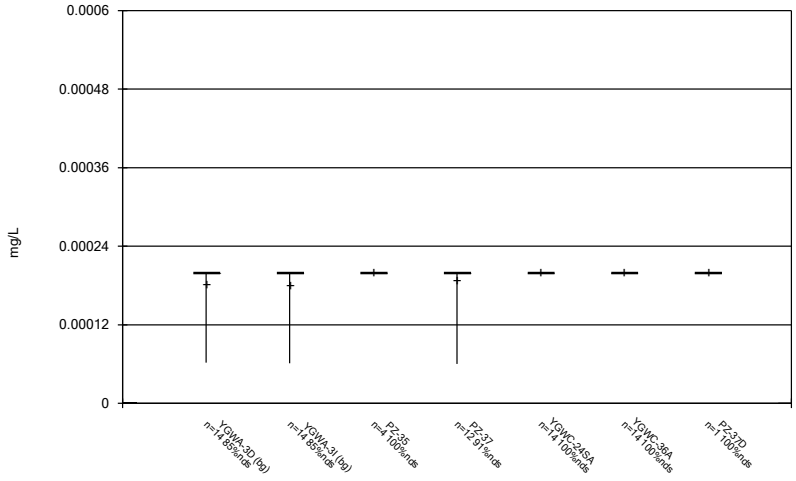
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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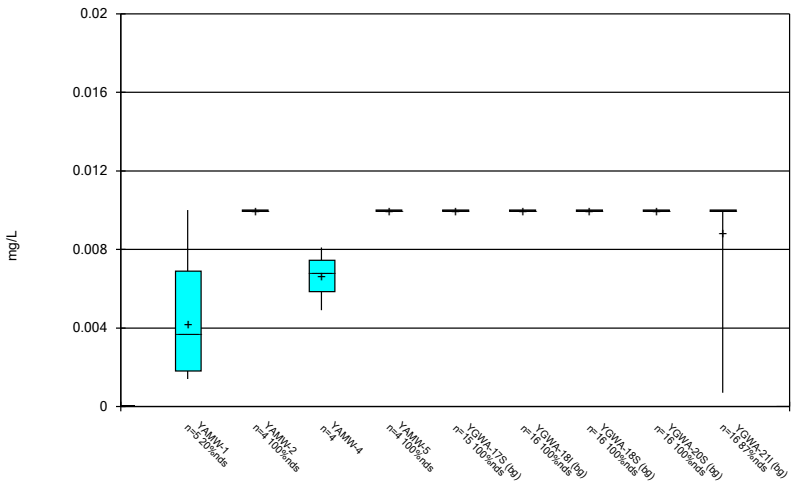
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

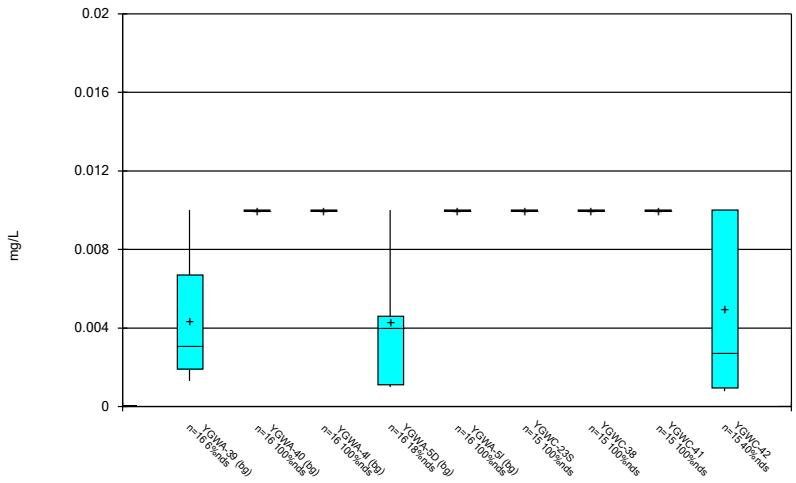


Constituent: Molybdenum Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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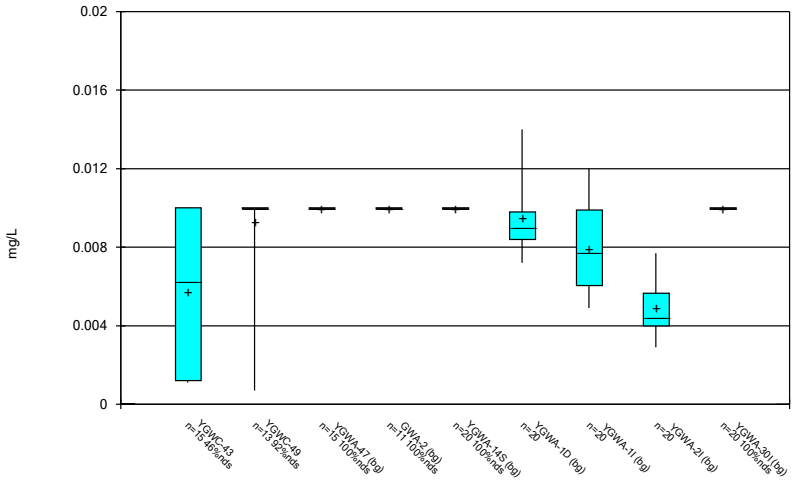
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

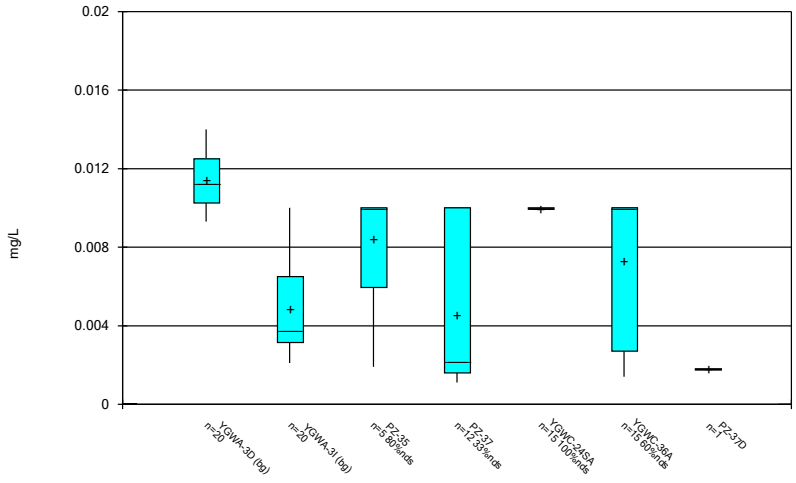


Constituent: Molybdenum Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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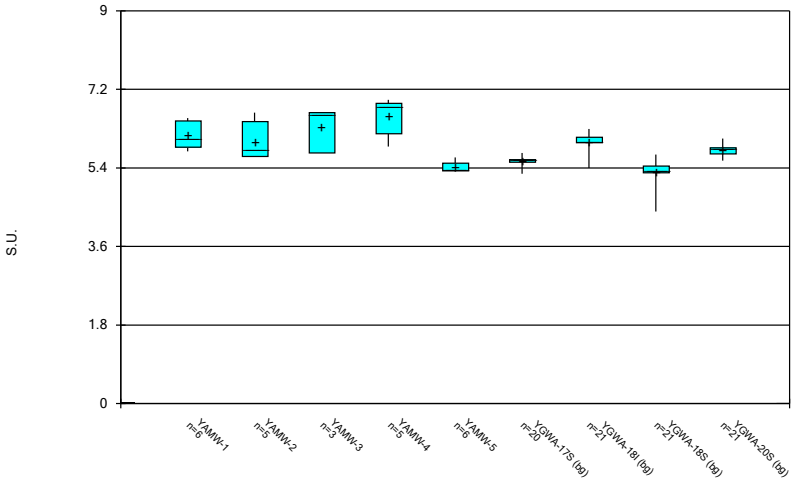
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

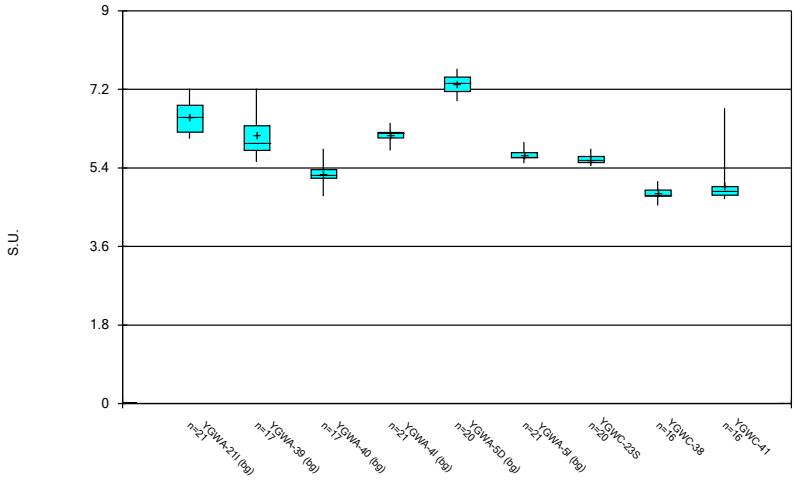


Constituent: pH Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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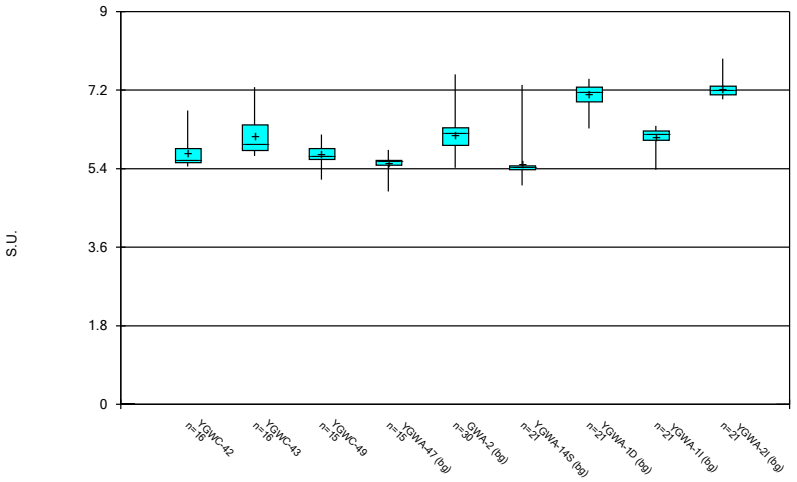
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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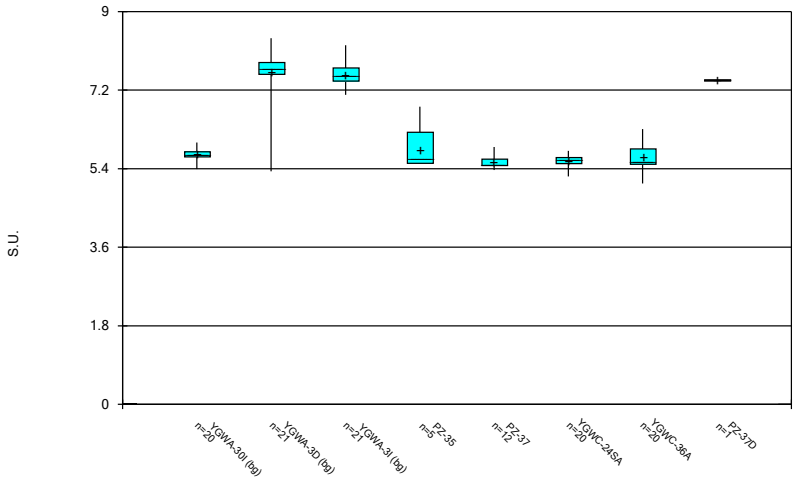
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

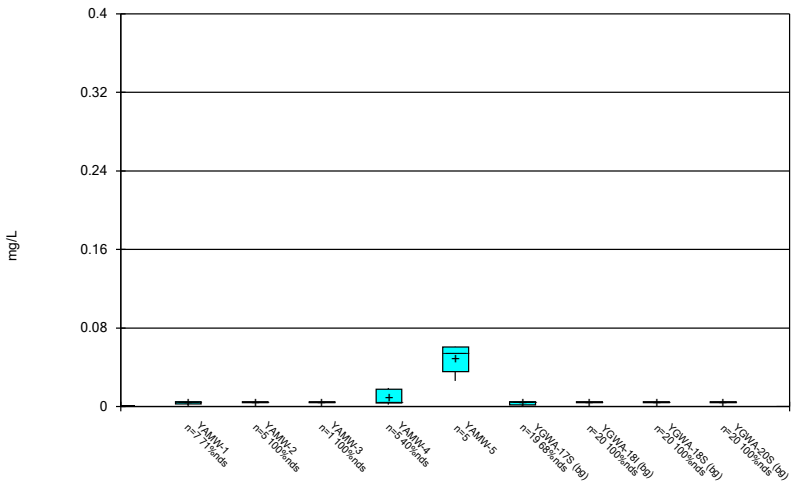
Box & Whiskers Plot



Constituent: pH Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot

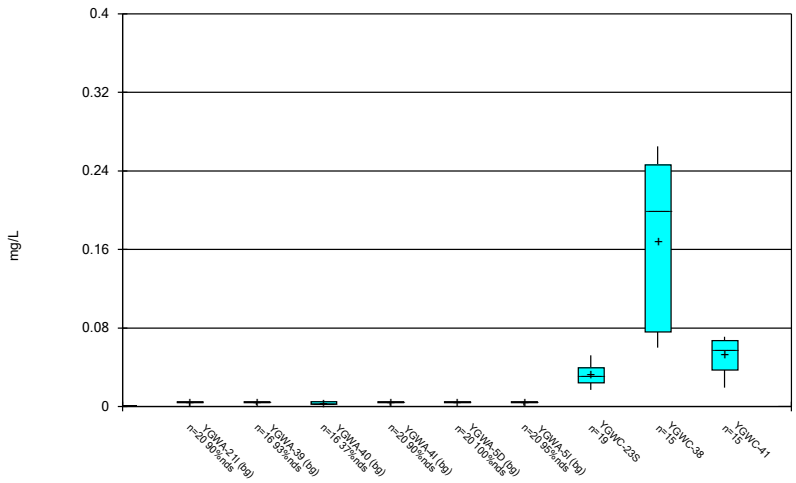


Constituent: Selenium Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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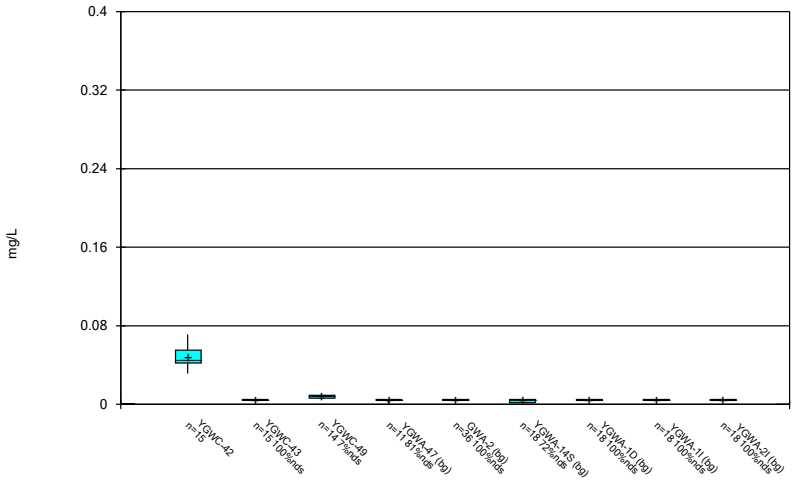
Box & Whiskers Plot



Constituent: Selenium Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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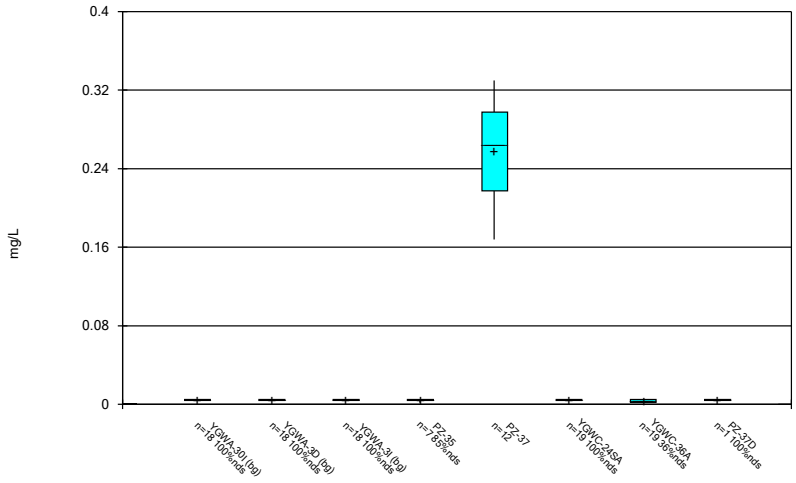
Box & Whiskers Plot



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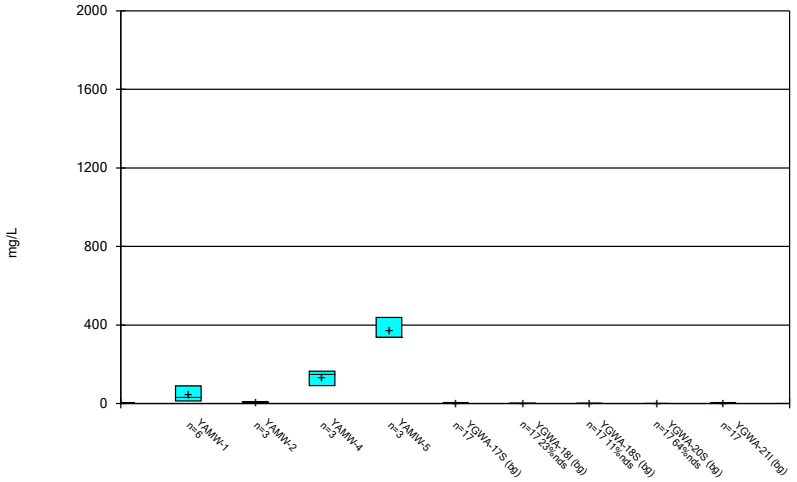
Box & Whiskers Plot

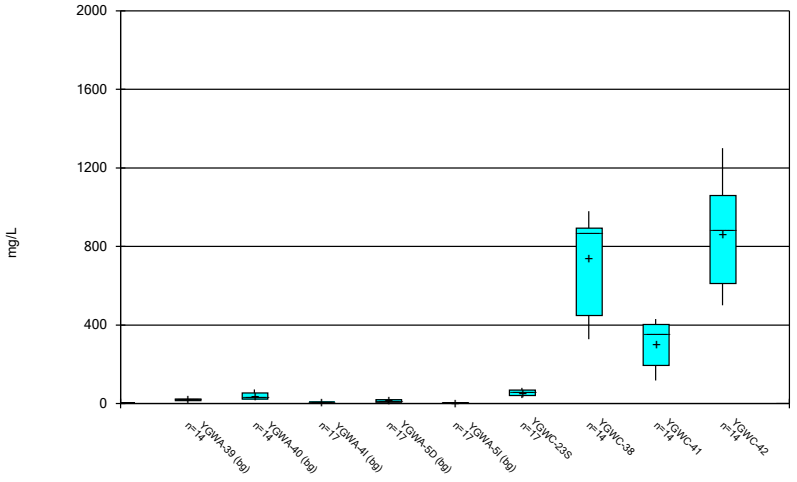


Constituent: Sulfate Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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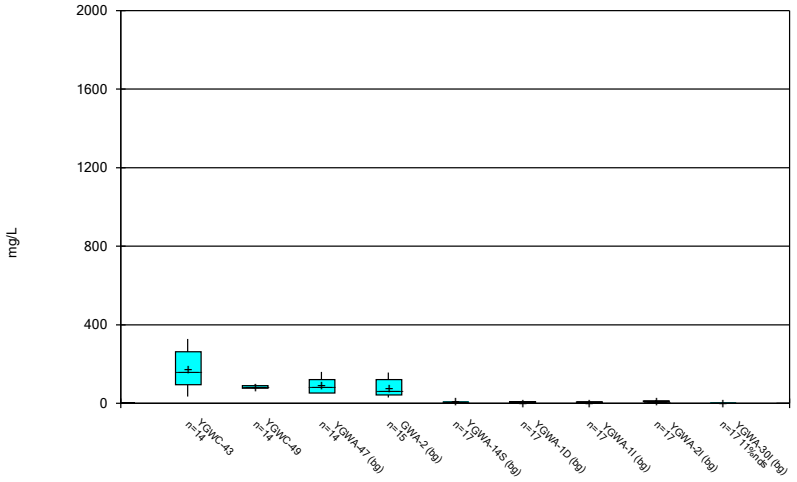

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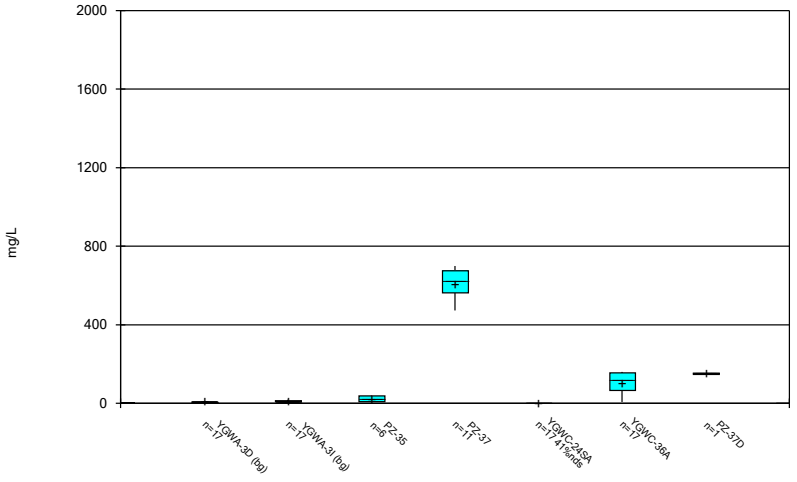
Box & Whiskers Plot



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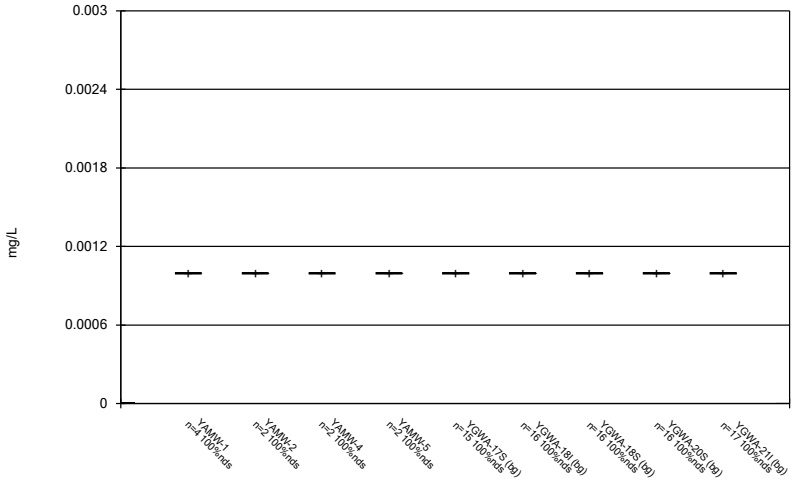
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Box & Whiskers Plot



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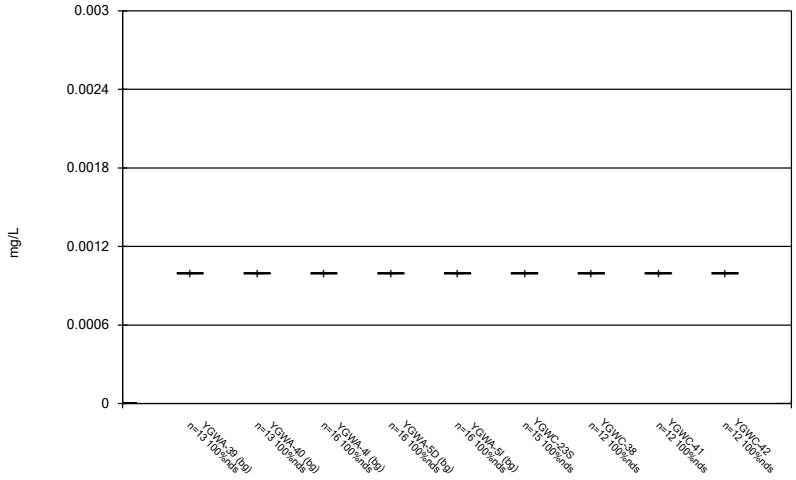
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



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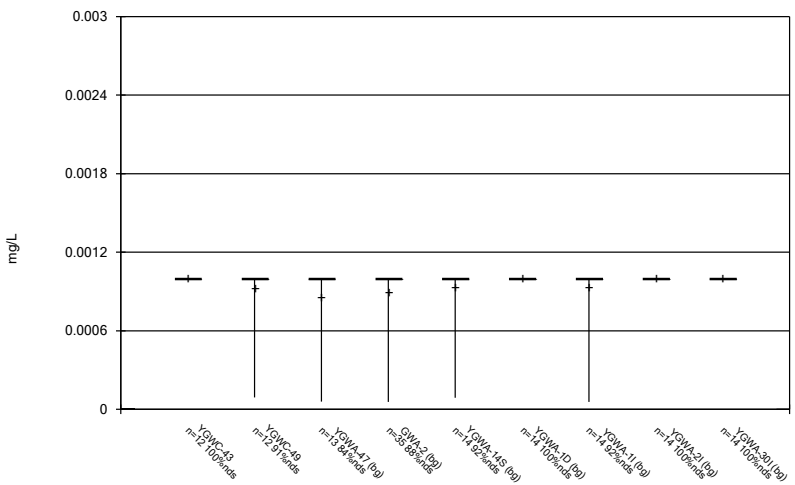
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot

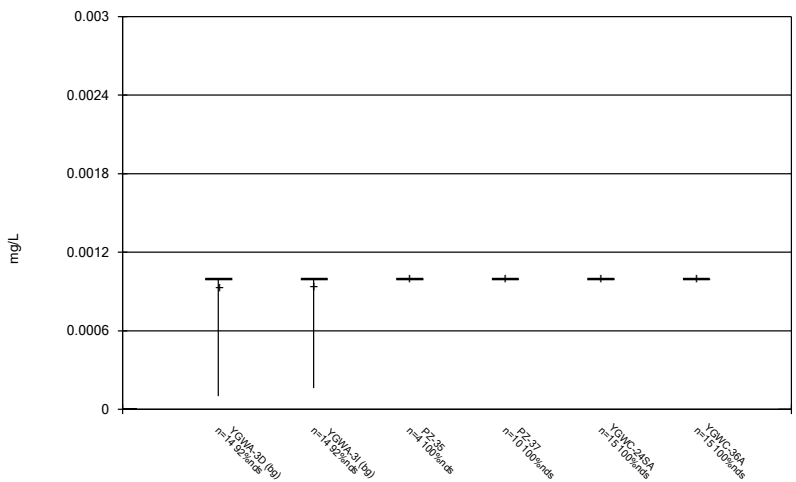


Constituent: Thallium Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

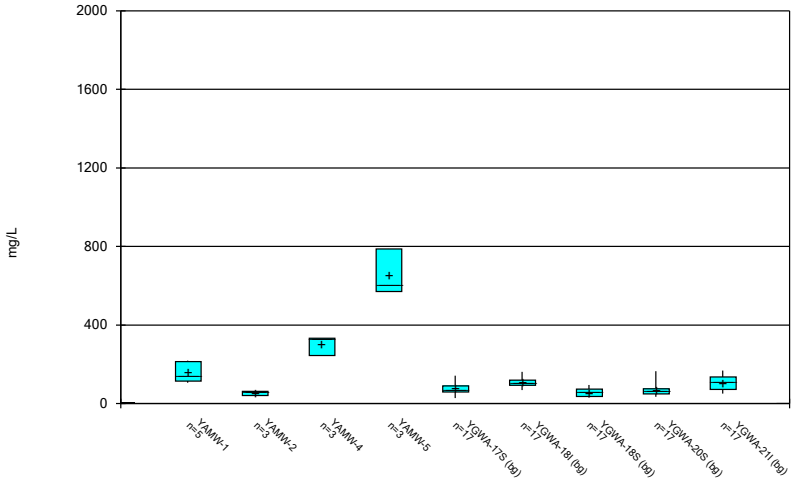
Box & Whiskers Plot



Constituent: Thallium Analysis Run 1/6/2022 12:05 PM

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

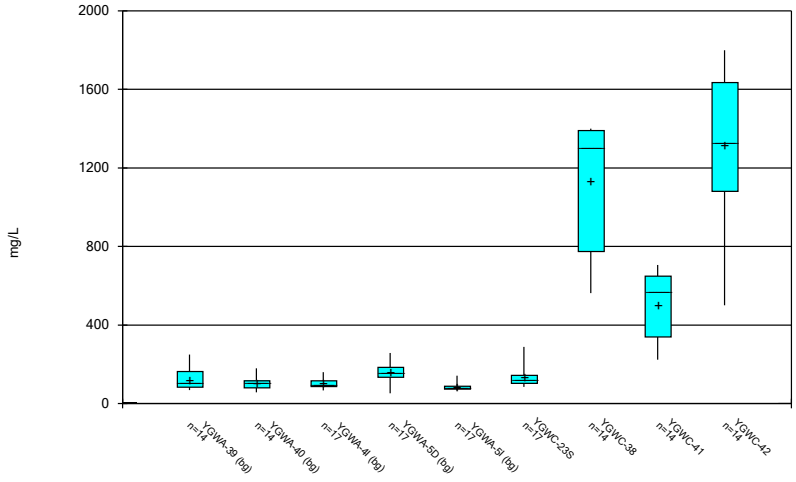
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:05 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

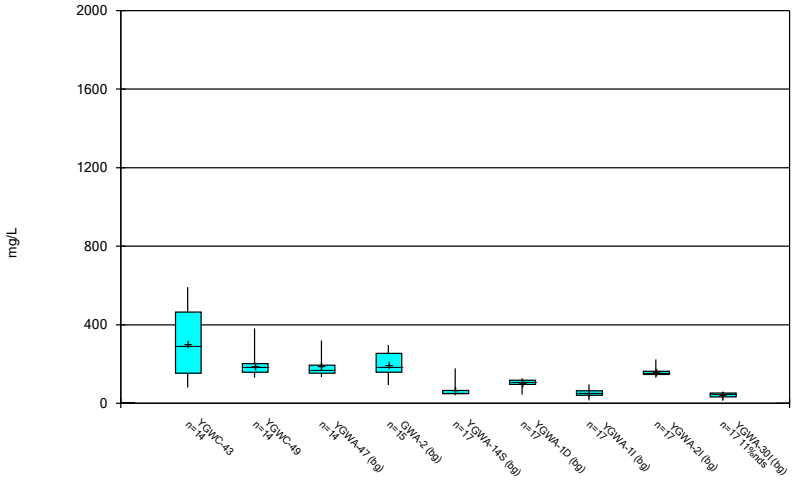
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:05 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

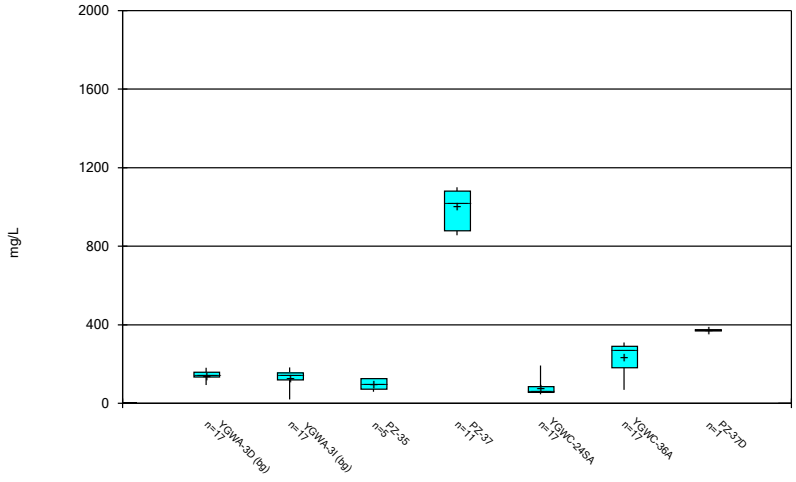
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:05 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.32 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/6/2022 12:05 PM
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

FIGURE C.

Outlier Summary

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/28/2021, 6:44 PM

	GWA-2 Cobalt (mg/L)	YGWA-47 pH (S.U.)
4/2/2018		6.3 (O)
8/26/2020	0.2 (O)	
9/22/2020	0.16 (O)	
3/2/2021	0.21 (O)	
8/20/2021	0.074 (O)	

FIGURE D.

Appendix III Interwell Prediction Limits - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:49 AM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**8/25/2021**	**1.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**8/26/2021**	**6.1**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**8/26/2021**	**3.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**8/25/2021**	**13.5**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**9/27/2021**	**0.64**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**8/26/2021**	**73.6**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**8/25/2021**	**79.9**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	**YGWC-24SA**	**8.5**	**n/a**	**9/1/2021**	**8.9**	**Yes**	**312**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**8/26/2021**	**328**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**8/25/2021**	**500**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-38**	**222.7**	**n/a**	**8/26/2021**	**562**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**222.7**	**n/a**	**8/26/2021**	**225**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**222.7**	**n/a**	**8/25/2021**	**886**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:49 AM

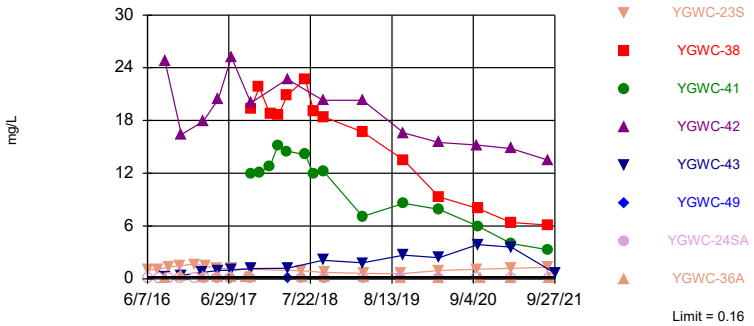
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**YGWC-23S**	**0.16**	**n/a**	**8/25/2021**	**1.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-38**	**0.16**	**n/a**	**8/26/2021**	**6.1**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-41**	**0.16**	**n/a**	**8/26/2021**	**3.3**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-42**	**0.16**	**n/a**	**8/25/2021**	**13.5**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	**YGWC-43**	**0.16**	**n/a**	**9/27/2021**	**0.64**	**Yes**	**312**	**n/a**	**n/a**	**47.12**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Boron (mg/L)	YGWC-49	0.16	n/a	9/1/2021	0.04ND	No	312	n/a	n/a	47.12	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-24SA	0.16	n/a	9/1/2021	0.04ND	No	312	n/a	n/a	47.12	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Boron (mg/L)	YGWC-36A	0.16	n/a	9/3/2021	0.012J	No	312	n/a	n/a	47.12	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-23S	37	n/a	8/25/2021	10.6	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-38**	**37**	**n/a**	**8/26/2021**	**73.6**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-41	37	n/a	8/26/2021	12.8	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	**YGWC-42**	**37**	**n/a**	**8/25/2021**	**79.9**	**Yes**	**312**	**n/a**	**n/a**	**0.9615**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Calcium (mg/L)	YGWC-43	37	n/a	9/27/2021	4.1	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-49	37	n/a	9/1/2021	12.1	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-24SA	37	n/a	9/1/2021	2.3	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Calcium (mg/L)	YGWC-36A	37	n/a	9/3/2021	4.1	No	312	n/a	n/a	0.9615	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-23S	8.5	n/a	8/25/2021	2.5	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-38	8.5	n/a	8/26/2021	4.1	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-41	8.5	n/a	8/26/2021	3.6	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-42	8.5	n/a	8/25/2021	3.4	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-43	8.5	n/a	9/27/2021	1.1	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	YGWC-49	8.5	n/a	9/1/2021	4.4	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Chloride (mg/L)	**YGWC-24SA**	**8.5**	**n/a**	**9/1/2021**	**8.9**	**Yes**	**312**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Chloride (mg/L)	YGWC-36A	8.5	n/a	9/3/2021	7	No	312	n/a	n/a	0	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Fluoride (mg/L)	YGWC-23S	0.68	n/a	8/25/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-38	0.68	n/a	8/26/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-41	0.68	n/a	8/26/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-42	0.68	n/a	8/25/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-43	0.68	n/a	9/27/2021	0.1	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-49	0.68	n/a	9/1/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-24SA	0.68	n/a	9/1/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
Fluoride (mg/L)	YGWC-36A	0.68	n/a	9/3/2021	0.1ND	No	381	n/a	n/a	67.98	n/a	n/a	0.00004917	NP Inter (NDs) 1 of 2
pH (S.U.)	YGWC-23S	8.39	4.4	8/25/2021	5.46	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-38	8.39	4.4	8/26/2021	4.54	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-41	8.39	4.4	8/26/2021	6.77	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-42	8.39	4.4	8/25/2021	6.73	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-43	8.39	4.4	9/27/2021	6.08	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-49	8.39	4.4	9/1/2021	5.15	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-24SA	8.39	4.4	9/1/2021	5.22	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
pH (S.U.)	YGWC-36A	8.39	4.4	9/3/2021	5.06	No	391	n/a	n/a	0	n/a	n/a	0.00009834	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-23S	160	n/a	8/25/2021	68	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-38**	**160**	**n/a**	**8/26/2021**	**328**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-41	160	n/a	8/26/2021	117	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**YGWC-42**	**160**	**n/a**	**8/25/2021**	**500**	**Yes**	**312**	**n/a**	**n/a**	**6.09**	**n/a**	**n/a**	**0.00004917**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	YGWC-43	160	n/a	9/27/2021	56.5	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-49	160	n/a	9/1/2021	79.8	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-24SA	160	n/a	9/1/2021	0.5ND	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Sulfate (mg/L)	YGWC-36A	160	n/a	9/3/2021	13.8	No	312	n/a	n/a	6.09	n/a	n/a	0.00004917	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	YGWC-23S	222.7	n/a	8/25/2021	141	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**YGWC-38**	**222.7**	**n/a**	**8/26/2021**	**562**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-41**	**222.7**	**n/a**	**8/26/2021**	**225**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**YGWC-42**	**222.7**	**n/a**	**8/25/2021**	**886**	**Yes**	**312**	**10.03**	**2.584**	**0.641**	**None**	**sqrt(x)**	**0.0009403**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	YGWC-43	222.7	n/a	9/27/2021	158	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-49	222.7	n/a	9/1/2021	163	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-24SA	222.7	n/a	9/1/2021	96	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	YGWC-36A	222.7	n/a	9/3/2021	89	No	312	10.03	2.584	0.641	None	sqrt(x)	0.0009403	Param Inter 1 of 2

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-23S, YGWC-38, YGWC-41, YGWC-42, YGWC-43

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. 47.12% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

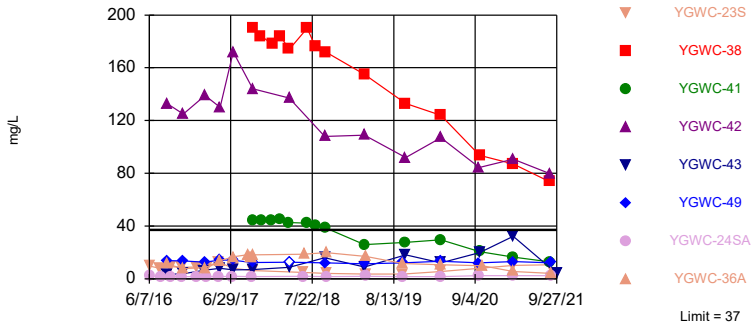
Constituent: Boron Analysis Run 10/29/2021 8:44 AM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Exceeds Limit: YGWC-38, YGWC-42

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. 0.9615% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

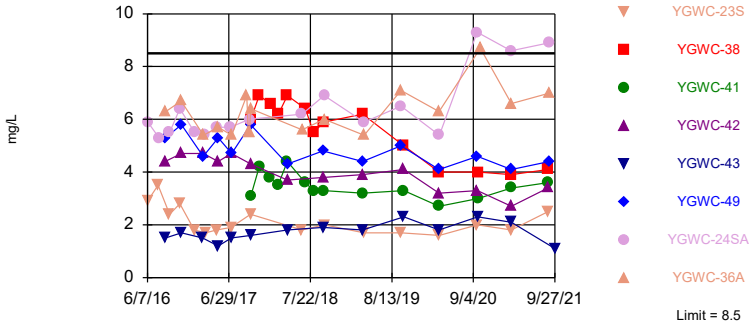
Constituent: Calcium Analysis Run 10/29/2021 8:44 AM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Exceeds Limit: YGWC-24SA

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

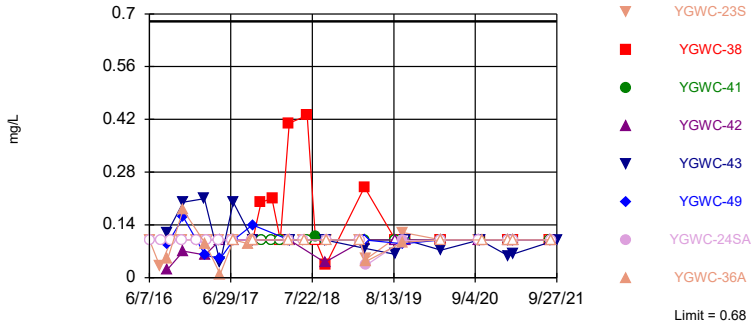
Constituent: Chloride Analysis Run 10/29/2021 8:44 AM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 381 background values. 67.98% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

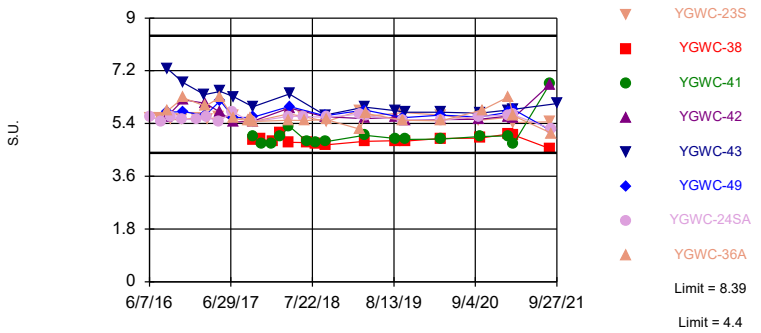
Constituent: Fluoride Analysis Run 10/29/2021 8:44 AM View: Appendix III
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Within Limits

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 391 background values. Annual per-constituent alpha = 0.001573. Individual comparison alpha = 0.00009834 (1 of 2). Comparing 8 points to limit.

Constituent: pH Analysis Run 10/29/2021 8:44 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

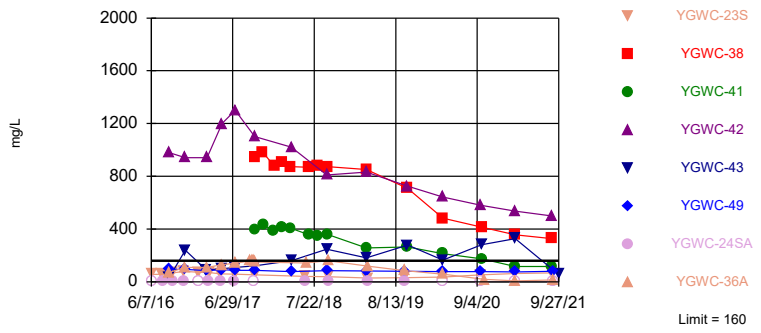
Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Exceeds Limit: YGWC-38, YGWC-42

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 312 background values. 6.09% NDs. Annual per-constituent alpha = 0.0007864. Individual comparison alpha = 0.00004917 (1 of 2). Comparing 8 points to limit.

Constituent: Sulfate Analysis Run 10/29/2021 8:44 AM View: Appendix III

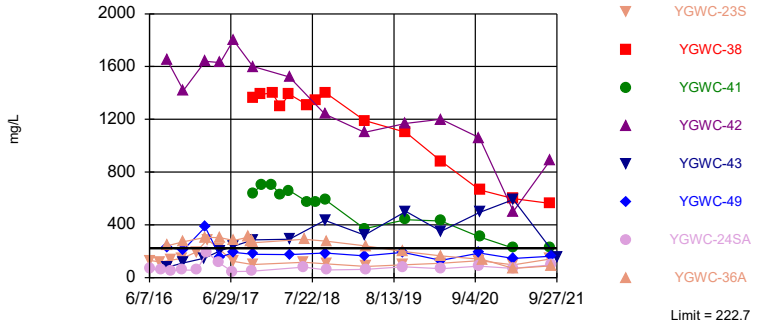
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Exceeds Limit: YGWC-38, YGWC-41, YGWC-42

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=10.03, Std. Dev.=2.584, n=312, 0.641% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 12.68, critical = 14.07. Kappa = 1.894 (c=7, w=8, 1 of 2, event alpha = 0.05132). N exceeds UG tables; Kappa based on n=150. Report alpha = 0.007498. Individual comparison alpha = 0.0009403. Comparing 8 points to limit.

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:44 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	<0.04	<0.04							
6/7/2016			<0.04	<0.04	<0.04	0.99			
6/8/2016							<0.04		
7/25/2016									
7/26/2016									
7/27/2016	0.0059 (J)	<0.04	<0.04		0.008 (J)				
7/28/2016				<0.04		1.09			
8/1/2016							<0.04		
8/30/2016								24.7	0.0166 (J)
8/31/2016									
9/1/2016									
9/2/2016									
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					
9/20/2016						1.35	<0.04		
11/1/2016									
11/2/2016			<0.04						
11/3/2016	0.0082 (J)	<0.04		<0.04	0.0077 (J)				
11/4/2016									
11/8/2016						1.5	<0.04		
11/14/2016									0.0166 (J)
11/15/2016									
11/16/2016								16.4	
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017	0.0096 (J)	<0.04			0.0092 (J)				
1/12/2017									
1/13/2017			<0.04	<0.04					
1/16/2017						1.67			
1/17/2017							<0.04		
2/21/2017									
2/22/2017									
2/24/2017									0.0145 (J)
2/27/2017								17.9	
2/28/2017									
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							<0.04		
3/9/2017						1.44			
4/26/2017	0.0091 (J)	<0.04	<0.04	<0.04					
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
5/2/2017					<0.04	1.2	0.0099 (J)		
5/8/2017									0.0141 (J)
5/9/2017									
5/10/2017								20.4	
5/26/2017									
6/27/2017									
6/28/2017	0.0079 (J)	<0.04							
6/29/2017			<0.04	<0.04	0.0074 (J)				
6/30/2017									
7/7/2017							0.0076 (J)		
7/10/2017						1.12			
7/11/2017								25.2	0.0131 (J)
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				<0.04					
10/4/2017	0.009 (J)		<0.04		0.0077 (J)				
10/5/2017		<0.04					<0.04		
10/6/2017									
10/10/2017									0.0124 (J)
10/11/2017						1.09			
10/12/2017								20	
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018									0.013 (J)
4/3/2018									
4/4/2018								22.7	
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)				
6/12/2018						0.9	0.018 (J)		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									0.012 (J)
9/20/2018								20.3	
9/24/2018									
9/25/2018	0.007 (J)	0.0046 (J)	<0.04	0.0054 (J)	0.0096 (J)				
9/26/2018							0.0055 (J)		
9/27/2018						0.71			
10/1/2018									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								20.3	0.013 (J)
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				0.011 (J)	0.0066 (J)				
4/3/2019	0.0053 (J)	<0.04	<0.04						
4/4/2019						0.6	<0.04		
6/12/2019									
9/24/2019				0.018 (J)					
9/25/2019			<0.04		0.0081 (J)				
9/26/2019	0.0072 (J)	0.0062 (J)					0.0068 (J)		
9/27/2019						0.58			
10/8/2019									0.012 (J)
10/9/2019								16.6	
3/17/2020									0.023 (J)
3/18/2020									
3/19/2020									
3/24/2020	0.01 (J)	0.0054 (J)	<0.04	0.016 (J)	0.0092 (J)				
3/25/2020								15.5	
3/26/2020						0.94	0.033 (J)		
9/22/2020									0.0076 (J)
9/23/2020	0.006 (J)	0.021 (J)			0.0066 (J)		<0.04		
9/24/2020			0.0094 (J)	0.013 (J)		1.1		15.2	
9/25/2020									
10/7/2020									
3/1/2021									0.013 (J)
3/2/2021									
3/3/2021	0.0094 (J)	<0.04	<0.04		0.01 (J)		<0.04		
3/4/2021				0.0079 (J)		1.2		14.8	
8/19/2021									0.011 (J)
8/20/2021									
8/25/2021						1.3		13.5	
8/26/2021	<0.04								
8/27/2021		<0.04	<0.04		0.011 (J)				
9/1/2021				<0.04			<0.04		
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	0.169	0.0315 (J)							
9/1/2016			0.0113 (J)						
9/2/2016				0.133					
9/13/2016									
9/14/2016					<0.04				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					<0.04				
11/8/2016									
11/14/2016				0.287					
11/15/2016			0.0074 (J)						
11/16/2016	0.406								
11/28/2016		0.0095 (J)							
12/15/2016					0.0107 (J)				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					<0.04				
1/17/2017									
2/21/2017									
2/22/2017		<0.04							
2/24/2017	0.725								
2/27/2017			<0.04						
2/28/2017				0.215					
3/1/2017									
3/2/2017									
3/3/2017					<0.04				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					<0.04				
5/1/2017									

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017		0.0084 (J)							
5/9/2017			<0.04	0.233					
5/10/2017	0.955								
5/26/2017					<0.04				
6/27/2017									
6/28/2017					<0.04				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	0.994								
7/13/2017			0.0093 (J)	0.262					
7/17/2017		0.0092 (J)							
9/22/2017				0.238					
9/29/2017				0.235					
10/3/2017					<0.04				
10/4/2017									
10/5/2017									
10/6/2017				0.256					
10/10/2017									
10/11/2017			<0.04	0.245		0.0135 (J)			
10/12/2017	1.15						19.3	12	0.0401
10/16/2017		<0.04							
11/20/2017						0.0251 (J)	21.8		0.156
11/21/2017								12.1	
1/10/2018									0.15
1/11/2018						0.0255 (J)		12.8	
1/12/2018							18.7		
2/19/2018		<0.04						15.2	0.146
2/20/2018						<0.04	18.6		
4/2/2018									
4/3/2018						0.033 (J)	20.9	14.5	0.12
4/4/2018	1.2		0.0041 (J)						
6/5/2018									
6/6/2018									
6/7/2018					<0.04				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				0.25					
6/27/2018								14.1	
6/28/2018						0.053	22.7		0.16
8/6/2018		<0.04							
8/7/2018						0.024 (J)	19.1	11.9	0.12
9/19/2018									
9/20/2018	2.1		0.0042 (J)						
9/24/2018						0.028 (J)	18.4	12.2	0.099
9/25/2018									
9/26/2018				0.24					
9/27/2018									
10/1/2018					<0.04				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019		<0.04							
3/26/2019									0.096
3/27/2019						0.017 (J)	16.7		
3/28/2019	1.8		<0.04					7.1	
3/29/2019					0.0065 (J)				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				0.22					
6/12/2019		<0.04							
9/24/2019					0.0076 (J)				
9/25/2019									
9/26/2019			<0.04	0.13					
9/27/2019									
10/8/2019		<0.04							
10/9/2019	2.7					0.017 (J)	13.5	8.6	0.079
3/17/2020		0.0051 (J)							
3/18/2020									
3/19/2020					0.0073 (J)				
3/24/2020									0.088 (J)
3/25/2020	2.4		0.012 (J)	0.11		0.043 (J)	9.3	7.9	
3/26/2020									
9/22/2020		0.0079 (J)							
9/23/2020					<0.04				
9/24/2020			0.062 (J)			0.037 (J)			0.087 (J)
9/25/2020	3.9						8	6	
10/7/2020				0.018 (J)					
3/1/2021									
3/2/2021		<0.04							
3/3/2021					<0.04				
3/4/2021	3.6		<0.04	0.0088 (J)		0.033 (J)	6.4	4	0.078
8/19/2021									
8/20/2021		<0.04							
8/25/2021									
8/26/2021						0.095	6.1	3.3	
8/27/2021					<0.04				
9/1/2021			<0.04						
9/3/2021				0.012 (J)					0.077
9/27/2021	0.64								

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	21	12	2.5						
6/2/2016				1.3	28	8.8	1.3	33	2.4
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	20.3		2.16				1.17		
7/26/2016		11		1.24	24.5	7.69		32.3	2.12
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		11.8	2.21						
9/14/2016	19.7					8.49		31	2.18
9/15/2016				1.17	27				
9/16/2016									
9/19/2016							1.05		
9/20/2016									
11/1/2016	18.4	11			25.6		1.14		
11/2/2016				1.23		7.83		30.9	
11/3/2016									
11/4/2016			2.67						2.17 (J)
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017				1.24					
1/11/2017	20.3	11.2			27.5				
1/12/2017								35.7	2.37
1/13/2017						8.08			
1/16/2017			2.45				1.23		
1/17/2017									
2/21/2017							1.25		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	18.6								
3/2/2017		11	2.57		27.5				
3/3/2017									
3/6/2017						8.64			
3/7/2017								32.7	2.34
3/8/2017				1.21					
3/9/2017									
4/26/2017	25.6			1.14	30.4		1.03		
4/27/2017		11.1	2.38						
4/28/2017									
5/1/2017						13.4		37	

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
5/2/2017									2.17
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		13.8	2.36					36.5	2.13
6/28/2017	23.9				29.8				
6/29/2017						8.81			
6/30/2017				1.24			1.13		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		14	2.21					30.9	2.15
10/4/2017	22.1				29.7		1.09		
10/5/2017				1.11		9.29			
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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					29.1	8.2			2.3
6/8/2018	21.9 (J)			1.1					
6/11/2018							1.1		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018						9.5 (J)		25.8	2.3
9/27/2018									
10/1/2018	19.7	15.1	1.8	0.99	26.9				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
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						8.4		24.7 (J)	2.8
4/4/2019									
6/12/2019									
9/24/2019		15.8	2.3					25.8	2.5
9/25/2019	22.4			1.1	29.5	9.5	1.1		
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020			2.1	1.1					
3/19/2020	21.9	15			31.5		1.2		
3/24/2020								26.1	2.5
3/25/2020						10.5			
3/26/2020									
9/22/2020						9.6		27.2	2.6
9/23/2020	23.6	14.1	1.8		28.6				
9/24/2020							1.1		
9/25/2020				1.3					
10/7/2020									
3/1/2021							1.2		
3/2/2021				1.2				1.6	2.6
3/3/2021	20.6	14.1	1.8		29.8	7.7			
3/4/2021									
8/19/2021		14.2	2	1.2	28.1		1.2		
8/20/2021									
8/25/2021									
8/26/2021						7.6		25.2	2.5
8/27/2021	24.7								
9/1/2021									
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	1.4	6.2							
6/7/2016			2.3	3.7	2.2	9.6			
6/8/2016							1.9		
7/25/2016									
7/26/2016									
7/27/2016	1.19	4.73	2.08		2				
7/28/2016				3.15		7.87			
8/1/2016							1.83		
8/30/2016								133	20.9
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	1.5				1.97				
9/19/2016		4.76	1.97	3.17					
9/20/2016						9.28	1.78		
11/1/2016									
11/2/2016			2.13						
11/3/2016	1.31	5.25		3.4	1.99				
11/4/2016									
11/8/2016						8.6	1.77		
11/14/2016									18.6
11/15/2016									
11/16/2016								125	
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017	1.25	4.74			2.28				
1/12/2017									
1/13/2017			2.45	4.98					
1/16/2017						8.85			
1/17/2017							1.7		
2/21/2017									
2/22/2017									
2/24/2017									16.1
2/27/2017								139	
2/28/2017									
3/1/2017	1.26	5.37							
3/2/2017					2.15				
3/3/2017									
3/6/2017			2.48	6.28					
3/7/2017									
3/8/2017							1.77		
3/9/2017						8.4			
4/26/2017	1.05	4.28	2.3	6.65					
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
5/2/2017					1.95	12.9	1.57		
5/8/2017									14.6
5/9/2017									
5/10/2017								130	
5/26/2017									
6/27/2017									
6/28/2017	1.06	4.95							
6/29/2017			2.54	6.04	2.02				
6/30/2017									
7/7/2017							1.8		
7/10/2017						8.09			
7/11/2017								172	14.3
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				8.28					
10/4/2017	1.1		2.25		2.03				
10/5/2017		5.28					1.7		
10/6/2017									
10/10/2017									12.1
10/11/2017						6.36			
10/12/2017								144	
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018									<25
4/3/2018									
4/4/2018								137	
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				
6/12/2018						4.7	1.8		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									11.1 (J)
9/20/2018								108	
9/24/2018									
9/25/2018	1	4.6	2.3	10.4 (J)	2.1				
9/26/2018							1.7		
9/27/2018						4.1			
10/1/2018									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								109	10.8 (J)
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				8.8	2.5				
4/3/2019	1.2	5.3	2.9						
4/4/2019						3.7	1.9		
6/12/2019									
9/24/2019				7.7					
9/25/2019			2.4		2.6				
9/26/2019	1.1	4.9					1.7		
9/27/2019						3.7			
10/8/2019									9.7
10/9/2019								92	
3/17/2020									14.8
3/18/2020									
3/19/2020									
3/24/2020	1	5.3	2.6	6	2.7				
3/25/2020								107	
3/26/2020						5.6	1.7		
9/22/2020									10.1
9/23/2020	0.91 (J)	5.2			2.6		2.4		
9/24/2020			2.6	7.8		7.9		84.3	
9/25/2020									
10/7/2020									
3/1/2021									10.3
3/2/2021									
3/3/2021	0.96 (J)	5.2	2.4		2.5		2.4		
3/4/2021				8.7		10.2		90.7	
8/19/2021									9.6
8/20/2021									
8/25/2021						10.6		79.9	
8/26/2021	0.98 (J)								
8/27/2021		5.1	2.4		2.7				
9/1/2021				9.5			2.3		
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	3.4	9.31							
9/1/2016			13.9						
9/2/2016				11.2					
9/13/2016									
9/14/2016					23.5				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					23.7				
11/8/2016									
11/14/2016				7.79					
11/15/2016			13.5						
11/16/2016	3.79								
11/28/2016		9.47 (B)							
12/15/2016					23.1				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					23.3				
1/17/2017									
2/21/2017									
2/22/2017		10.4							
2/24/2017	6.42								
2/27/2017			12.5						
2/28/2017				8.37					
3/1/2017									
3/2/2017									
3/3/2017					25.1				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					30.7				
5/1/2017									

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017		14.2							
5/9/2017			14.4	13.9					
5/10/2017	7.9								
5/26/2017					26.2				
6/27/2017									
6/28/2017					26.1				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	6.71								
7/13/2017			14.1	16.6					
7/17/2017		14.1							
9/22/2017				18.4					
9/29/2017				16.1					
10/3/2017					26.7				
10/4/2017									
10/5/2017									
10/6/2017				16.6					
10/10/2017									
10/11/2017			12.4	18.1		2.74			
10/12/2017	7.05						190	44.5	2.9
10/16/2017		13.6							
11/20/2017						1.81	184		10.4
11/21/2017								44.4	
1/10/2018									10.2
1/11/2018						1.54		43.9	
1/12/2018							178		
2/19/2018		<25						45.3	<25
2/20/2018						1.71	184		
4/2/2018									
4/3/2018						1.4	174	42.7	6.3
4/4/2018	8.6		<25						
6/5/2018									
6/6/2018									
6/7/2018					25				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				18.7 (J)					
6/27/2018								42.2	
6/28/2018						1.4	190		6.7
8/6/2018		11.4 (J)							
8/7/2018						1.2	176	40.7	6.3
9/19/2018									
9/20/2018	15.9 (J)		12 (J)						
9/24/2018						1.1	172	38.5	5.7
9/25/2018									
9/26/2018				19.8 (J)					
9/27/2018									
10/1/2018					25				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019		12.7 (J)							
3/26/2019									5.6
3/27/2019						1.5	155		
3/28/2019	8.9		11.3 (J)					26	
3/29/2019					23.5 (J)				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				16.9 (J)					
6/12/2019		18.9							
9/24/2019					26.4				
9/25/2019									
9/26/2019			12.1	11.7					
9/27/2019									
10/8/2019		28.3							
10/9/2019	18.2					2.4	133	27.6	4.9
3/17/2020		24.3							
3/18/2020									
3/19/2020					27.4				
3/24/2020									4.8
3/25/2020	12.1		13.2	10.6		2.7	124	29.6	
3/26/2020									
9/22/2020		31							
9/23/2020					26.3				
9/24/2020			12			3.7			4.4
9/25/2020	19.8						93.7	20.5	
10/7/2020				9.9					
3/1/2021									
3/2/2021		34.2							
3/3/2021					25.6				
3/4/2021	32.2		13	5.6		8.2	87	16.4	4.6
8/19/2021									
8/20/2021		26.5							
8/25/2021									
8/26/2021						14.1	73.6	12.8	
8/27/2021					22.6				
9/1/2021			12.1						
9/3/2021				4.1					5.6
9/27/2021	4.1								

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	1.3	1.3	1.6						
6/2/2016				4.1	1.4	3.7	1.9	7.2	4.3
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	1.3		1.4				1.7		
7/26/2016		1.2		4	1.6	3.6		6.6	4.4
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		1.1	1.3						
9/14/2016	1.3					3.4		6.6	3.8
9/15/2016				4.2	1.5				
9/16/2016									
9/19/2016							1.6		
9/20/2016									
11/1/2016	1.4	1.3			1.7		1.8		
11/2/2016				4.9		4.5		7.6	
11/3/2016									
11/4/2016			1.6						4.8
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017				4.1					
1/11/2017	1.1	1.1			1.2				
1/12/2017								6.8	3.8
1/13/2017						4.2			
1/16/2017			1.4				1.7		
1/17/2017									
2/21/2017							1.7		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	1.1								
3/2/2017		1	1.3		1.2				
3/3/2017									
3/6/2017						3.6			
3/7/2017								6.8	4.5
3/8/2017				4.2					
3/9/2017									
4/26/2017	1.1			4.1	1.2		1.7		
4/27/2017		1	1.3						
4/28/2017									
5/1/2017						4.3		7.2	

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
5/2/2017									4.6
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		1.1	1.4					7	4.3
6/28/2017	1.2				1.3				
6/29/2017						4.2			
6/30/2017				3.7			1.8		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		1.1	1.7					6.5	4.2
10/4/2017	1.2				1.5		1.8		
10/5/2017				3.8		4.7			
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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					1.2	4.4			4.5
6/8/2018	1.2			3.4					
6/11/2018							2		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018						4.8		4.8	5.1
9/27/2018									
10/1/2018	1.2	1.1	1.4	3.8	1.5				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
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						4.3		4	4.2
4/4/2019									
6/12/2019									
9/24/2019		1.1	1.3					3.7	4.5
9/25/2019	1.1			4.8	1.1	4.5	1.6		
9/26/2019									
9/27/2019									
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								3.5	4.3
3/25/2020						3.9			
3/26/2020									
9/22/2020						4.5		3.6	4.2
9/23/2020	1	0.99 (J)	1.2		1.1				
9/24/2020							1.5		
9/25/2020				5.3					
10/7/2020									
3/1/2021							1.6		
3/2/2021				4.9				3.2	4.3
3/3/2021	0.99 (J)	0.96 (J)	1.2		1.1	4.1			
3/4/2021									
8/19/2021		1.1	1.3	5	1.1		1.6		
8/20/2021									
8/25/2021									
8/26/2021						4.4		3.4	4.3
8/27/2021	1.1								
9/1/2021									
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	6.4	6.8							
6/7/2016			1.9	2.8	4.5	2.9			
6/8/2016							5.9		
7/25/2016									
7/26/2016									
7/27/2016	6.2	6.7	1.9		4.5				
7/28/2016				2.6		3.5			
8/1/2016							5.3		
8/30/2016								4.4	5.2
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	6.1				4.5				
9/19/2016		7	1.9	2.4					
9/20/2016						2.4	5.5		
11/1/2016									
11/2/2016			2.6						
11/3/2016	7.4	7.5		2.9	5.4				
11/4/2016									
11/8/2016						2.8	6.4		
11/14/2016									6.4
11/15/2016									
11/16/2016								4.7	
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017	6.1	6.5			4.7				
1/12/2017									
1/13/2017			2.3	2.5					
1/16/2017						1.8			
1/17/2017							5.5		
2/21/2017									
2/22/2017									
2/24/2017									5.5
2/27/2017								4.7	
2/28/2017									
3/1/2017	6	6.9							
3/2/2017					4.8				
3/3/2017									
3/6/2017			1.9	2.1					
3/7/2017									
3/8/2017							5.4		
3/9/2017						1.7			
4/26/2017	6.5	7	2	2.1					
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
5/2/2017					4.6	1.8	5.7		
5/8/2017									5.8
5/9/2017									
5/10/2017								4.4	
5/26/2017									
6/27/2017									
6/28/2017	6.4	7							
6/29/2017			2.6	2.8	4.5				
6/30/2017									
7/7/2017							5.7		
7/10/2017						1.9			
7/11/2017								4.7	5.8
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				2.2					
10/4/2017	6.8		2.6		4.7				
10/5/2017		7					6		
10/6/2017									
10/10/2017									5.9
10/11/2017						2.4			
10/12/2017								4.3	
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018									4.8
4/3/2018									
4/4/2018								3.7	
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				
6/12/2018						1.8	6.2		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									4
9/20/2018								3.8	
9/24/2018									
9/25/2018	7.8	7.9	3.6	2.2	5.6				
9/26/2018							6.9		
9/27/2018						2			
10/1/2018									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								3.9	4.3
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				2.5	4.8				
4/3/2019	6.3	6.9	3.1						
4/4/2019						1.7	5.9		
6/12/2019									
9/24/2019				3.1					
9/25/2019			2.8		5.7				
9/26/2019	7.1	7					6.5		
9/27/2019						1.7			
10/8/2019									4.4
10/9/2019								4.1	
3/17/2020									4.1
3/18/2020									
3/19/2020									
3/24/2020	6.8	7	2.7	2.8	5				
3/25/2020								3.2	
3/26/2020						1.6	5.4		
9/22/2020									4.2
9/23/2020	7.2	7.2			6.6		9.3		
9/24/2020			2.7	2		2		3.3	
9/25/2020									
10/7/2020									
3/1/2021									3.7
3/2/2021									
3/3/2021	7.2	7	2.7		7.1		8.6		
3/4/2021				1.8		1.8		2.7	
8/19/2021									3.5
8/20/2021									
8/25/2021						2.5		3.4	
8/26/2021	7.3								
8/27/2021		7.4	2.8		8.5				
9/1/2021				1.8			8.9		
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	1.5	4							
9/1/2016			5.3						
9/2/2016				6.3					
9/13/2016									
9/14/2016					1.1				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					1.4				
11/8/2016									
11/14/2016				6.7					
11/15/2016			5.8						
11/16/2016	1.7								
11/28/2016		4.2							
12/15/2016					2.9				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					0.98				
1/17/2017									
2/21/2017									
2/22/2017		3.7							
2/24/2017	1.5								
2/27/2017			4.6						
2/28/2017				5.4					
3/1/2017									
3/2/2017									
3/3/2017					1.1				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					0.91				
5/1/2017									

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017		4.2							
5/9/2017			5.3	5.7					
5/10/2017	1.2								
5/26/2017					0.93				
6/27/2017									
6/28/2017					1				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	1.5								
7/13/2017			4.7	5.4					
7/17/2017		3.8							
9/22/2017				6.9					
9/29/2017				5.5					
10/3/2017					1.2				
10/4/2017									
10/5/2017									
10/6/2017				5.5					
10/10/2017									
10/11/2017			5.8	6.4		2.4			
10/12/2017	1.6						6	3.1	3.8
10/16/2017		4.2							
11/20/2017						1.8	6.9		4.4
11/21/2017								4.2	
1/10/2018									4.6
1/11/2018						1.6		3.8	
1/12/2018							6.6		
2/19/2018		4.3						3.5	4.6
2/20/2018						2	6.2		
4/2/2018									
4/3/2018						3.3	6.9	4.4	5.9
4/4/2018	1.8		4.3						
6/5/2018									
6/6/2018									
6/7/2018					1				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				5.6					
6/27/2018								3.6	
6/28/2018						2.1	6.4		5
8/6/2018		3.8							
8/7/2018						1.2	5.5	3.3	4.3
9/19/2018									
9/20/2018	1.9		4.8						
9/24/2018						1.3	5.9	3.3	4.9
9/25/2018									
9/26/2018				6					
9/27/2018									
10/1/2018					1.1				

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019		4.1							
3/26/2019									4.4
3/27/2019						1.4	6.2		
3/28/2019	1.8		4.4					3.2	
3/29/2019					1.2				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				5.4					
6/12/2019		4.7							
9/24/2019					0.95 (J)				
9/25/2019									
9/26/2019			5	7.1					
9/27/2019									
10/8/2019		5.1							
10/9/2019	2.3					2.1	5	3.3	5.1
3/17/2020		4.8							
3/18/2020									
3/19/2020					0.97 (J)				
3/24/2020									4.7
3/25/2020	1.8		4.1	6.3		1.9	4	2.7	
3/26/2020									
9/22/2020		4.2							
9/23/2020					0.88 (J)				
9/24/2020			4.6			2.7			5
9/25/2020	2.3						4	3	
10/7/2020				8.7					
3/1/2021									
3/2/2021		4.1							
3/3/2021					0.86 (J)				
3/4/2021	2.1		4.1	6.6		4.9	3.9	3.4	4.9
8/19/2021									
8/20/2021		5.2							
8/25/2021									
8/26/2021						7.2	4.1	3.6	
8/27/2021					0.99 (J)				
9/1/2021			4.4						
9/3/2021				7					5.5
9/27/2021	1.1								

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-30I (bg)	YGWA-3D (bg)
6/1/2016	0.12 (J)	<0.1	0.15 (J)						
6/2/2016				<0.1	0.11 (J)	<0.1	<0.1	<0.1	0.62
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016		0.06 (J)	0.14 (J)					0.06 (J)	
7/26/2016	0.08 (J)			0.02 (J)	0.05 (J)	<0.1	<0.1		0.49
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016	0.11 (J)	<0.1							
9/14/2016			0.18 (J)		0.04 (J)	<0.1	<0.1		
9/15/2016				<0.1					0.54
9/16/2016									
9/19/2016								<0.1	
9/20/2016									
11/1/2016	<0.1		<0.1					<0.1	0.68
11/2/2016				<0.1	<0.1	<0.1			
11/3/2016									
11/4/2016		<0.1					<0.1		
11/8/2016									
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					0.04 (J)		<0.1		
1/13/2017						<0.1			
1/16/2017		<0.1						<0.1	
1/17/2017									
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					
3/9/2017									
4/26/2017			0.08 (J)	<0.1				<0.1	0.48
4/27/2017	0.04 (J)	0.01 (J)							
4/28/2017									
5/1/2017					<0.1	<0.1			

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-30I (bg)	YGWA-3D (bg)
5/2/2017							<0.1		
5/8/2017									
5/9/2017									
5/10/2017									
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			
6/30/2017				<0.1				<0.1	
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
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			
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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		
3/30/2018									
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	<0.1		0.48
6/8/2018			0.2 (J)	<0.1					
6/11/2018								<0.1	
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-30I (bg)	YGWA-3D (bg)
9/25/2018									
9/26/2018					<0.1	<0.1	<0.1		
9/27/2018									
10/1/2018	<0.1	<0.1	<0.1	<0.1					0.44
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					0.19 (J)	<0.1	<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)					<0.1	0.45
4/2/2019									
4/3/2019					0.047 (J)	<0.1	<0.1		
4/4/2019									
6/12/2019									
8/19/2019									
8/20/2019									
8/21/2019									
8/22/2019									
9/24/2019	0.063 (J)	<0.1			0.05 (J)		<0.1		
9/25/2019			0.1 (J)	<0.1		<0.1		<0.1	0.46
9/26/2019									
9/27/2019									
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	<0.1	<0.1	<0.1	0.4
3/17/2020									
3/18/2020		<0.1		<0.1					
3/19/2020	0.064 (J)		0.11 (J)					<0.1	0.51
3/24/2020					<0.1		<0.1		
3/25/2020						<0.1			
3/26/2020									
8/26/2020									
8/27/2020									
9/22/2020					0.056 (J)	<0.1	<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									
2/8/2021					0.055 (J)		<0.1		
2/9/2021						<0.1			
2/10/2021			<0.1	<0.1					0.43
2/11/2021								<0.1	
2/12/2021	0.068 (J)	<0.1							
3/1/2021								<0.1	

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-3I (bg)	YGWA-14S (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-5I (bg)	YGWA-30I (bg)	YGWA-3D (bg)
3/2/2021				<0.1	<0.1		<0.1		
3/3/2021	0.078 (J)	<0.1	0.1			<0.1			0.44
3/4/2021									
8/19/2021	0.074 (J)	<0.1		<0.1				<0.1	0.47
8/20/2021									
8/25/2021									
8/26/2021					0.061 (J)	<0.1	<0.1		
8/27/2021			0.12						
9/1/2021									
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	<0.1	<0.1							
6/7/2016			<0.1	<0.1	<0.1	<0.1			
6/8/2016							<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)	0.03 (J)					
8/1/2016							<0.1		
8/30/2016								0.02 (J)	0.09 (J)
8/31/2016									
9/1/2016									
9/2/2016									
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				
9/20/2016				<0.1			<0.1		
11/1/2016									
11/2/2016					<0.1				
11/3/2016	<0.1	<0.1	<0.1			<0.1			
11/4/2016									
11/8/2016				<0.1			<0.1		
11/14/2016									0.18 (J)
11/15/2016									
11/16/2016								0.07 (J)	
11/28/2016									
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				<0.1					
1/17/2017							<0.1		
2/21/2017									
2/22/2017									
2/24/2017									0.05 (J)
2/27/2017								0.06 (J)	
2/28/2017									
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							<0.1		
3/9/2017				<0.1					
4/26/2017	<0.1	<0.1	0.04 (J)		<0.1				
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
5/2/2017				<0.1		<0.1	<0.1		
5/8/2017									0.03 (J)
5/9/2017									
5/10/2017								<0.1	
5/26/2017									
6/27/2017									
6/28/2017	<0.1	<0.1							
6/29/2017			<0.1		<0.1	<0.1			
6/30/2017									
7/7/2017							<0.1		
7/10/2017				<0.1					
7/11/2017								<0.1	0.07 (J)
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017			<0.1						
10/4/2017	<0.1				<0.1	<0.1			
10/5/2017		<0.1					<0.1		
10/6/2017									
10/10/2017									<0.1
10/11/2017				<0.1					
10/12/2017								<0.1	
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
3/27/2018									
3/28/2018	<0.1	<0.1				<0.1			
3/29/2018			<0.1		<0.1				
3/30/2018				<0.1			<0.1		
4/2/2018									<0.1
4/3/2018									
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			
6/12/2018				<0.1			<0.1		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									<0.1
9/20/2018								0.041 (J)	
9/24/2018									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
9/25/2018	<0.1	<0.1	0 (J)		<0.1	<0.1			
9/26/2018							<0.1		
9/27/2018				<0.1					
10/1/2018									
10/2/2018									
2/25/2019									
2/26/2019									
2/27/2019									
3/4/2019									
3/5/2019	<0.1		0.32		<0.1	<0.1	<0.1		
3/6/2019		<0.1		<0.1					
3/26/2019									
3/27/2019								<0.1	0.081 (J)
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019			0.12 (J)			<0.1			
4/3/2019	<0.1	<0.1			<0.1				
4/4/2019				0.049 (J)			0.033 (J)		
6/12/2019									
8/19/2019									
8/20/2019									<0.1
8/21/2019									
8/22/2019								<0.1	
9/24/2019			0.15 (J)						
9/25/2019					<0.1	<0.1			
9/26/2019	<0.1	<0.1					0.098 (J)		
9/27/2019				0.12 (J)					
10/8/2019									0.034 (J)
10/9/2019								<0.1	
2/10/2020									
2/11/2020	<0.1	<0.1				<0.1			
2/12/2020			0.1 (J)		<0.1				
3/17/2020									<0.1
3/18/2020									
3/19/2020									
3/24/2020	<0.1	<0.1	0.081 (J)		<0.1	<0.1			
3/25/2020								<0.1	
3/26/2020				<0.1			<0.1		
8/26/2020									
8/27/2020									<0.1
9/22/2020									<0.1
9/23/2020	<0.1	<0.1				<0.1	<0.1		
9/24/2020			0.079 (J)	<0.1	<0.1			<0.1	
9/25/2020									
10/7/2020									
2/8/2021									
2/9/2021	<0.1	<0.1	0.092 (J)	<0.1	<0.1		<0.1		
2/10/2021								<0.1	
2/11/2021									
2/12/2021									
3/1/2021									<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWC-23S	YGWA-20S (bg)	YGWA-17S (bg)	YGWC-24SA	YGWC-42	YGWA-47 (bg)
3/2/2021									
3/3/2021	<0.1	<0.1			<0.1	<0.1	<0.1		
3/4/2021			0.091 (J)	<0.1				<0.1	
8/19/2021									<0.1
8/20/2021									
8/25/2021				<0.1				<0.1	
8/26/2021	<0.1								
8/27/2021		<0.1			<0.1	<0.1			
9/1/2021			0.11				<0.1		
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38	YGWC-41
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	0.12 (J)	0.14 (J)							
9/1/2016			0.09 (J)						
9/2/2016				0.05 (J)					
9/13/2016									
9/14/2016					0.08 (J)				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					<0.1				
11/8/2016									
11/14/2016				0.18 (J)					
11/15/2016			0.16 (J)						
11/16/2016	0.2 (J)								
11/28/2016		0.12 (J)							
12/15/2016					0.06 (J)				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					0.1 (J)				
1/17/2017									
2/21/2017									
2/22/2017		0.09 (J)							
2/24/2017	0.21 (J)								
2/27/2017			0.06 (J)						
2/28/2017				0.09 (J)					
3/1/2017									
3/2/2017									
3/3/2017					<0.1				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					0.06 (J)				
5/1/2017									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38	YGWC-41
5/2/2017									
5/8/2017		0.05 (J)							
5/9/2017			0.05 (J)	0.009 (J)					
5/10/2017	0.04 (J)								
5/26/2017					0.09 (J)				
6/27/2017									
6/28/2017					0.11 (J)				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	0.2 (J)								
7/13/2017			<0.1	<0.1					
7/17/2017		0.14 (J)							
9/22/2017				0.09 (J)					
9/29/2017				<0.1					
10/3/2017					<0.1				
10/4/2017									
10/5/2017									
10/6/2017				<0.1					
10/10/2017									
10/11/2017			0.14 (J)	<0.1		<0.1			
10/12/2017	0.1 (J)						<0.1	<0.1	<0.1
10/16/2017		0.12 (J)							
11/20/2017						<0.1	<0.1	0.2 (J)	
11/21/2017									<0.1
1/10/2018							<0.1		
1/11/2018						<0.1			<0.1
1/12/2018								0.21 (J)	
2/19/2018		0.17					<0.1		<0.1
2/20/2018						0.23		<0.1	
3/27/2018									
3/28/2018					0.31				
3/29/2018									
3/30/2018				<0.1					
4/2/2018									
4/3/2018						<0.1	<0.1	0.41	<0.1
4/4/2018	<0.1		<0.1						
6/5/2018									
6/6/2018									
6/7/2018					0.11 (J)				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				<0.1					
6/27/2018									<0.1
6/28/2018						<0.1	<0.1	0.43	
8/6/2018		0.087 (J)							
8/7/2018						0.048 (J)	<0.1	<0.1	0.11 (J)
9/19/2018									
9/20/2018	<0.1		<0.1						
9/24/2018						<0.1	<0.1	0.034 (J)	<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38	YGWC-41
9/25/2018									
9/26/2018				<0.1					
9/27/2018									
10/1/2018					<0.1				
10/2/2018									
2/25/2019		0.14 (J)							
2/26/2019									
2/27/2019					0.12 (J)				
3/4/2019									
3/5/2019									
3/6/2019				<0.1					
3/26/2019							<0.1		
3/27/2019						<0.1		0.24 (J)	
3/28/2019	0.078 (J)		<0.1						0.1 (J)
3/29/2019					0.13 (J)				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				0.043 (J)					
6/12/2019		0.12 (J)							
8/19/2019		<0.1							
8/20/2019									
8/21/2019	0.062 (J)					<0.1	<0.1		
8/22/2019								<0.1	<0.1
9/24/2019					0.081 (J)				
9/25/2019									
9/26/2019			0.09 (J)	0.094 (J)					
9/27/2019									
10/8/2019		0.052 (J)							
10/9/2019	<0.1					<0.1	<0.1	<0.1	<0.1
2/10/2020									
2/11/2020					0.075 (J)				
2/12/2020						<0.1	<0.1		
3/17/2020		0.053 (J)							
3/18/2020									
3/19/2020					0.093 (J)				
3/24/2020							<0.1		
3/25/2020	0.073 (J)		<0.1	<0.1		<0.1		<0.1	<0.1
3/26/2020									
8/26/2020		0.068 (J)							
8/27/2020									
9/22/2020		0.058 (J)							
9/23/2020					0.08 (J)				
9/24/2020			<0.1			<0.1	<0.1		
9/25/2020	<0.1							<0.1	<0.1
10/7/2020				<0.1					
2/8/2021									
2/9/2021	0.058 (J)		<0.1					<0.1	
2/10/2021				<0.1	0.094 (J)	<0.1	<0.1		<0.1
2/11/2021									
2/12/2021									
3/1/2021									

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWA-40 (bg)	YGWC-38	YGWC-41
3/2/2021		0.073 (J)							
3/3/2021					0.085 (J)				
3/4/2021	0.063 (J)		<0.1	<0.1		<0.1	<0.1	<0.1	<0.1
8/19/2021									
8/20/2021		0.06 (J)							
8/25/2021									
8/26/2021						0.063 (J)		<0.1	<0.1
8/27/2021					0.12				
9/1/2021			<0.1						
9/3/2021				<0.1			<0.1		
9/27/2021	0.1								

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (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					5.46	5.75	7.67	6.36	7.84
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016		7.74		6.21		5.82			
7/26/2016			7.43		5.45		7.66	6.22	7.88
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016			7.44	6.16					
9/14/2016		7.65					7.6	6.23	
9/15/2016					5.45				7.74
9/16/2016									
9/19/2016						5.78 (D)			
9/20/2016									
11/1/2016		7.7	7.24			5.62			7.75
11/2/2016					5.41		7.35	6.08	
11/3/2016									
11/4/2016				6.29					
11/8/2016									
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			
1/17/2017									
2/21/2017						5.67			
2/22/2017	6.21								
2/24/2017									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
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	
3/7/2017							7.43		
3/8/2017					5.41				
3/9/2017									
4/26/2017		7.4			5.02	5.56			7.45
4/27/2017			6.99	6.09					
4/28/2017									
5/1/2017							7.22	6.21	
5/2/2017									
5/8/2017	6.12								
5/9/2017									
5/10/2017									
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					5.39	5.72			
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017	6.03								
9/22/2017									
9/29/2017									
10/3/2017			6.81	5.98			7.48		
10/4/2017		7.45				5.87			7.49
10/5/2017					5.49			6.16	
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017	6.12								
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018	6.13								
2/20/2018									
3/27/2018				6.25	5.47	5.83			
3/28/2018		7.74							7.91
3/29/2018			7.38				7.02	6.09	
3/30/2018									
4/2/2018									
4/3/2018									
4/4/2018									
6/5/2018			7.16						

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
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			
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018	6.01								
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018							7.13	5.84	
9/27/2018									
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					5.46	5.77			
2/27/2019		7.54	6.84	5.8					7.55
3/4/2019							7.46	6.18	
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							7.11	6.43	
4/4/2019									
6/12/2019	6.3								
8/19/2019	6.23								
8/20/2019									
8/21/2019									
8/22/2019									
9/24/2019			7.07	6.23			6.93		
9/25/2019		7.47			5.19	5.69		6.2	7.64
9/26/2019									
9/27/2019									
10/8/2019	6.28								
10/9/2019									
2/10/2020			7.2	6.1					
2/11/2020		7.09							
2/12/2020					5.48	5.8	7.52	6.15	7.83
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	
3/26/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	GWA-2 (bg)	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-4I (bg)	YGWA-3D (bg)
5/6/2020	6.24								
8/26/2020	5.67								
8/27/2020									
9/22/2020	5.78						7.19 (D)	5.8 (D)	
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								
8/25/2021									
8/26/2021							7.16	5.82	
8/27/2021		7.39							
9/1/2021									
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
8/27/2008									
3/3/2009									
11/18/2009									
3/3/2010									
3/10/2011									
9/8/2011									
3/5/2012									
9/10/2012									
2/6/2013									
8/12/2013									
2/5/2014									
8/3/2015									
2/16/2016									
6/1/2016									
6/2/2016	5.75								
6/6/2016		5.71	6.17						
6/7/2016				6.1	5.62	5.77	5.57		
6/8/2016								5.65	
7/25/2016									
7/26/2016	5.72								
7/27/2016		5.46	6.14		5.59	5.79			
7/28/2016				6.12			5.6		
8/1/2016								5.47	
8/30/2016									5.75
8/31/2016									
9/1/2016									
9/2/2016									
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			
9/20/2016							5.53	5.61	
11/1/2016									
11/2/2016						5.67			
11/3/2016		5.39	5.97	6.07	5.59				
11/4/2016	5.61								
11/8/2016							5.53	5.55	
11/14/2016									5.59
11/15/2016									
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							5.59		
1/17/2017								5.53	
2/21/2017									
2/22/2017									
2/24/2017									5.49

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
2/27/2017									
2/28/2017									
3/1/2017		5.41	5.94						
3/2/2017					5.54				
3/3/2017									
3/6/2017				6.34		5.63			
3/7/2017	5.66								
3/8/2017								5.62	
3/9/2017							5.56		
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		5.61	5.46	
5/8/2017									5.58
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017	5.7								
6/28/2017		5.36	6						
6/29/2017				6.47	5.56	5.85			
6/30/2017									
7/7/2017								5.81	
7/10/2017							5.68		
7/11/2017									5.58
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017	5.79			6.56					
10/4/2017		5.32			5.57	5.83			
10/5/2017			6.11					5.45	
10/6/2017									
10/10/2017									5.49
10/11/2017							5.46		
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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			
3/30/2018							5.73	5.64	
4/2/2018									6.3 (O)
4/3/2018									
4/4/2018									
6/5/2018				6.09					

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
6/6/2018						5.86			
6/7/2018	5.63		5.98						
6/8/2018									
6/11/2018		5.28			5.58				
6/12/2018							5.63	5.64	
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									5.48
9/20/2018									
9/24/2018									
9/25/2018		4.86	5.81	6.67	5.59	5.84			
9/26/2018	5.63							5.61	
9/27/2018							5.47		
10/1/2018									
10/2/2018									
2/25/2019									
2/26/2019									
2/27/2019									
3/4/2019	5.75								
3/5/2019		5.26		7.22	5.48	6.07		5.72	
3/6/2019			5.99				5.84		
3/26/2019									
3/27/2019									5.83
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			
4/4/2019							5.64	5.66	
6/12/2019									
8/19/2019									
8/20/2019									5.58
8/21/2019									
8/22/2019									
9/24/2019	5.6			6.87					
9/25/2019					5.49	5.86			
9/26/2019		5.2	6.04					5.52	
9/27/2019							5.77		
10/8/2019									5.59
10/9/2019									
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
3/18/2020									
3/19/2020									
3/24/2020	5.81	5.33	5.98	6.35	5.57	5.86			
3/25/2020									
3/26/2020							5.69	5.51	

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-5I (bg)	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWA-20S (bg)	YGWC-23S	YGWC-24SA	YGWA-47 (bg)
5/6/2020									
8/26/2020									
8/27/2020									4.88
9/22/2020	5.99 (D)								5.46
9/23/2020		5.29 (D)	6.01 (D)		5.58 (D)			5.64	
9/24/2020				6.7 (D)		5.8 (D)	5.51		
9/25/2020									
10/7/2020									
2/8/2021	5.67								
2/9/2021		5.43	6.12	6.95		5.86	5.61	5.69	
2/10/2021									
2/11/2021									
2/12/2021									
3/1/2021									5.48
3/2/2021	5.63								
3/3/2021		5.31	5.89		5.52	5.89		5.7	
3/4/2021				6.8			5.44		
8/19/2021									5.5
8/20/2021									
8/25/2021							5.46		
8/26/2021	5.51	4.4							
8/27/2021			5.4		5.27	5.57			
9/1/2021				6.65				5.22	
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
8/27/2008									
3/3/2009									
11/18/2009									
3/3/2010									
3/10/2011									
9/8/2011									
3/5/2012									
9/10/2012									
2/6/2013									
8/12/2013									
2/5/2014									
8/3/2015									
2/16/2016									
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016	5.64								
8/31/2016		7.27							
9/1/2016			5.78						
9/2/2016				5.84					
9/13/2016					7.41				
9/14/2016									
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					7.12				
11/8/2016									
11/14/2016				6.28					
11/15/2016			5.81						
11/16/2016	6.21	6.79							
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				
1/17/2017									
2/21/2017									
2/22/2017									
2/24/2017		6.39							

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
2/27/2017	6.09		5.68						
2/28/2017				5.99					
3/1/2017									
3/2/2017									
3/3/2017					7.22				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					7.21				
5/1/2017									
5/2/2017									
5/8/2017									
5/9/2017			6.18	6.3					
5/10/2017	5.79	6.5							
5/26/2017					7.13				
6/27/2017									
6/28/2017					7.06				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	5.45	6.32							
7/13/2017			5.6	5.57					
7/17/2017									
9/22/2017				5.5					
9/29/2017				5.58					
10/3/2017					6.99				
10/4/2017									
10/5/2017									
10/6/2017				5.51					
10/10/2017									
10/11/2017			5.61	5.47		6.4			
10/12/2017	5.48	5.97					4.94	4.85	5.43
10/16/2017									
11/20/2017						6.33		4.87	5.1
11/21/2017							4.69		
1/10/2018									4.97
1/11/2018						6.29	4.73		
1/12/2018								4.78	
2/19/2018							4.96		5.6
2/20/2018						7.22		5.1	
3/27/2018									
3/28/2018					7.3				
3/29/2018									
3/30/2018				5.51					
4/2/2018									
4/3/2018						6.87	5.31	4.76	5.84
4/4/2018	5.93	6.41	5.98						
6/5/2018									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
6/6/2018									
6/7/2018					7.29				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				5.5					
6/27/2018							4.78		
6/28/2018						6.18		4.75	5.24
8/6/2018									
8/7/2018						6.08	4.77	4.72	5.18
9/19/2018									
9/20/2018	5.63	5.69	5.67						
9/24/2018						5.81	4.78	4.67	5.14
9/25/2018									
9/26/2018				5.53					
9/27/2018									
10/1/2018					7.07				
10/2/2018									
2/25/2019									
2/26/2019									
2/27/2019					7.27				
3/4/2019									
3/5/2019									
3/6/2019				5.21					
3/26/2019									5.3
3/27/2019	5.57					5.84		4.79	
3/28/2019		5.96	5.86				5		
3/29/2019					7.06				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				5.74					
6/12/2019									
8/19/2019									
8/20/2019									
8/21/2019		5.84				5.96			5.26
8/22/2019	5.61						4.89	4.81	
9/24/2019					7.01				
9/25/2019									
9/26/2019			5.6	5.51					
9/27/2019									
10/8/2019									
10/9/2019	5.5	5.78				5.81	4.86	4.8	5.22
2/10/2020									
2/11/2020					7.38				
2/12/2020						5.97			5.3
3/17/2020									
3/18/2020									
3/19/2020					7.22				
3/24/2020									5.29
3/25/2020	5.53	5.79	5.69	5.49		5.78	4.87	4.89	
3/26/2020									

Prediction Limit

Constituent: pH (S.U.) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-41	YGWC-38	YGWA-40 (bg)
5/6/2020									
8/26/2020									
8/27/2020									
9/22/2020									
9/23/2020					7.22				
9/24/2020	5.55		5.62			5.7 (D)			5.43 (D)
9/25/2020		5.75					4.95	4.9	
10/7/2020				5.86					
2/8/2021									
2/9/2021		5.86	5.79					5.04	
2/10/2021	5.65			6.31	7.29	5.8	4.98		5.19
2/11/2021									
2/12/2021									
3/1/2021									
3/2/2021									
3/3/2021					7.92				
3/4/2021	5.59	5.88	5.88	5.67		5.54	4.69	5.01	5.23
8/19/2021									
8/20/2021									
8/25/2021	6.73								
8/26/2021						6.91	6.77	4.54	
8/27/2021					7.14				
9/1/2021			5.15						
9/3/2021				5.06					4.75
9/27/2021		6.08							

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	12	5	4.2						
6/2/2016				6.6	5.8	8	1.3	20	1.9
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	8.4		3.7				1.2		
7/26/2016		5.4		6.1	6.7	7.7		20	1.8
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		2.9	5.2						
9/14/2016	8.6					7.5		19	1.8
9/15/2016				6.1	6				
9/16/2016									
9/19/2016							1.2		
9/20/2016									
11/1/2016	8.9	3.9			4.9		1.3		
11/2/2016				6.3		8.2		20	
11/3/2016									
11/4/2016			5						2
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017				5.9					
1/11/2017	8.6	3.7			4.5				
1/12/2017								19	1.9
1/13/2017						8.1			
1/16/2017			7.9				<1		
1/17/2017									
2/21/2017							1.4		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	9.3								
3/2/2017		4.6	7.4		4.4				
3/3/2017									
3/6/2017						8			
3/7/2017								20	2.1
3/8/2017				7					
3/9/2017									
4/26/2017	11			7	5.1		1.4		
4/27/2017		5.2	7.4						
4/28/2017									
5/1/2017						8.4		20	

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
5/2/2017									2
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		5.9	6.4					18	2.1
6/28/2017	12				5.4				
6/29/2017						9.2			
6/30/2017				6.5			<1		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		6.6	5.9					16	2.3
10/4/2017	12				6.2		1.4		
10/5/2017				7.9		9.6			
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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					6.7	8.5			2
6/8/2018	9.6			6.4					
6/11/2018							1.1		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018						10.2		7.9	2.3
9/27/2018									
10/1/2018	9.1	5.6	4	6.8	7.1				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
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						8.5		7	2.1
4/4/2019									
6/12/2019									
9/24/2019		5.3	4.3					5.5	2.4
9/25/2019	13.8			6.6	7	8.5	0.81 (J)		
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020			5.3	8.1					
3/19/2020	12.9	10			9		1.6		
3/24/2020								5.9	2.1
3/25/2020						8.8			
3/26/2020									
9/22/2020						8.2		5.5	2.1
9/23/2020	16.8	8.1	3.4		6.9				
9/24/2020							0.69 (J)		
9/25/2020				6.1					
10/7/2020									
3/1/2021							0.88 (J)		
3/2/2021				6				2.6	2.3
3/3/2021	9.6	9	4.4		7	7.8			
3/4/2021									
8/19/2021		8.9	4.9	6.7	7.5		1		
8/20/2021									
8/25/2021									
8/26/2021						8.5		6	2.4
8/27/2021	18.2								
9/1/2021									
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	1.8	1.2							
6/7/2016			<1	5.2	4.4	56			
6/8/2016							<1		
7/25/2016									
7/26/2016									
7/27/2016	1.9	1.7	0.08 (J)		4.7				
7/28/2016				5.1		57			
8/1/2016							1.1		
8/30/2016								980	160
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	1.7				4.8				
9/19/2016		1.8	0.08 (J)	4.8					
9/20/2016						68	0.38 (J)		
11/1/2016									
11/2/2016			0.1 (J)						
11/3/2016	1.9	0.69 (J)		5	5.3				
11/4/2016									
11/8/2016						79	0.39 (J)		
11/14/2016									150
11/15/2016									
11/16/2016								940	
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017	1.7	<1			5.2				
1/12/2017									
1/13/2017			<1	4.3					
1/16/2017						72			
1/17/2017							<1		
2/21/2017									
2/22/2017									
2/24/2017									120
2/27/2017								940	
2/28/2017									
3/1/2017	<1	1.8							
3/2/2017					5				
3/3/2017									
3/6/2017			<1	4.5					
3/7/2017									
3/8/2017							0.29 (J)		
3/9/2017						69			
4/26/2017	1.9	1.6	<1	4.9					
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
5/2/2017					5	60	0.29 (J)		
5/8/2017									120
5/9/2017									
5/10/2017								1200	
5/26/2017									
6/27/2017									
6/28/2017	<1	<1							
6/29/2017			<1	5.5	5.2				
6/30/2017									
7/7/2017							0.37 (J)		
7/10/2017						57			
7/11/2017								1300	110
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				5.8					
10/4/2017	1.7		<1		5.3				
10/5/2017		1.6					<1		
10/6/2017									
10/10/2017									93
10/11/2017						52			
10/12/2017								1100	
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018									88.8
4/3/2018									
4/4/2018								1020	
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				
6/12/2018						41.4	0.35 (J)		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									75
9/20/2018								810	
9/24/2018									
9/25/2018	1.5	1	0.13 (J)	7	6.1				
9/26/2018							0.28 (J)		
9/27/2018						39.6			
10/1/2018									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								831	65.9
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				3.8	5.1				
4/3/2019	1.3	0.82 (J)	0.12 (J)						
4/4/2019						27.9	0.29 (J)		
6/12/2019									
9/24/2019				1					
9/25/2019			<1		5.5				
9/26/2019	1	0.64 (J)					0.23 (J)		
9/27/2019						30.3			
10/8/2019									52.3
10/9/2019								725	
3/17/2020									71.6
3/18/2020									
3/19/2020									
3/24/2020	0.99 (J)	<1	<1	3	5.4				
3/25/2020								642	
3/26/2020						36.5	<1		
9/22/2020									51.5
9/23/2020	1.1	0.53 (J)			5.1		<1		
9/24/2020			<1	3.6		52.5		579	
9/25/2020									
10/7/2020									
3/1/2021									51.6
3/2/2021									
3/3/2021	1	<1	<1		5.2		<1		
3/4/2021				4.5		61.7 (M1)		537	
8/19/2021									52.6
8/20/2021									
8/25/2021						68		500	
8/26/2021	1.2								
8/27/2021		0.59 (J)	<1		5.3				
9/1/2021				5			<1		
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	34	29							
9/1/2016			95						
9/2/2016				72					
9/13/2016									
9/14/2016					9.4				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					13				
11/8/2016									
11/14/2016				110					
11/15/2016			94						
11/16/2016	240								
11/28/2016		36							
12/15/2016					1.8				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					11				
1/17/2017									
2/21/2017									
2/22/2017		43							
2/24/2017	89								
2/27/2017			84						
2/28/2017				110					
3/1/2017									
3/2/2017									
3/3/2017					8.8				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					10				
5/1/2017									

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017		60							
5/9/2017			91	130					
5/10/2017	100								
5/26/2017					12				
6/27/2017									
6/28/2017					11				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	110								
7/13/2017			88	140					
7/17/2017		63							
9/22/2017				160					
9/29/2017				160					
10/3/2017					7.9				
10/4/2017									
10/5/2017									
10/6/2017				160					
10/10/2017									
10/11/2017			86	150		20			
10/12/2017	120						940	400	17
10/16/2017		62							
11/20/2017						24	980		71
11/21/2017								430	
1/10/2018									66
1/11/2018						23		390	
1/12/2018							880		
2/19/2018		64.6						414	57.2
2/20/2018						20.6	905		
4/2/2018									
4/3/2018						24.5	872	406	49.4
4/4/2018	160		76.5						
6/5/2018									
6/6/2018									
6/7/2018					8.8				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				144					
6/27/2018								357	
6/28/2018						22	869		43.8
8/6/2018		42.1							
8/7/2018						20.7	879	346	40.5
9/19/2018									
9/20/2018	247		84.1						
9/24/2018						21.2	872	358	39.7
9/25/2018									
9/26/2018				160					
9/27/2018									
10/1/2018					9.1				

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019		42.1							
3/26/2019									34.3
3/27/2019						17.7	851		
3/28/2019	181		82.8					258	
3/29/2019					9				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				119					
6/12/2019		83.4							
9/24/2019					9.1				
9/25/2019									
9/26/2019			80	84.8					
9/27/2019									
10/8/2019		128							
10/9/2019	279					15	708	263	27.9
3/17/2020		98.6							
3/18/2020									
3/19/2020					12.4				
3/24/2020									25.2
3/25/2020	164		76.1	58.8		14.3	483	214	
3/26/2020									
9/22/2020		145							
9/23/2020					11.8				
9/24/2020			77			11.7			22.9
9/25/2020	281						414	175	
10/7/2020				18.2					
3/1/2021									
3/2/2021		156							
3/3/2021					10.6				
3/4/2021	328		75.1	6.3		12	356	117	21.5
8/19/2021									
8/20/2021		121							
8/25/2021									
8/26/2021						19.2	328	117	
8/27/2021					16.7				
9/1/2021			79.8						
9/3/2021				13.8					21.3
9/27/2021	56.5								

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
6/1/2016	150	120	54						
6/2/2016				46	130	96	36	160	66
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016	135		48				50		
7/26/2016		94		54	141	92		177	78
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016		105	67						
9/14/2016	127					102		187	73
9/15/2016				54	153				
9/16/2016									
9/19/2016							35		
9/20/2016									
11/1/2016	75	44			92		<25		
11/2/2016				71		115		181	
11/3/2016									
11/4/2016			60						75
11/8/2016									
11/14/2016									
11/15/2016									
11/16/2016									
11/28/2016									
12/15/2016									
1/10/2017				45					
1/11/2017	148	107			159				
1/12/2017								202	86
1/13/2017						67			
1/16/2017			65				47		
1/17/2017									
2/21/2017							<25		
2/22/2017									
2/24/2017									
2/27/2017									
2/28/2017									
3/1/2017	182								
3/2/2017		98	61		117				
3/3/2017									
3/6/2017						159			
3/7/2017								257	108
3/8/2017				178					
3/9/2017									
4/26/2017	92			52	181		55		
4/27/2017		116	31						
4/28/2017									
5/1/2017						107		165	

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
5/2/2017									103
5/8/2017									
5/9/2017									
5/10/2017									
5/26/2017									
6/27/2017		89	42					189	73
6/28/2017	126				169				
6/29/2017						79			
6/30/2017				45			42		
7/7/2017									
7/10/2017									
7/11/2017									
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017		119	58					170	89
10/4/2017	147				141		31		
10/5/2017				40		95			
10/6/2017									
10/10/2017									
10/11/2017									
10/12/2017									
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
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					95	90			142
6/8/2018	158			114					
6/11/2018							59		
6/12/2018									
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									
9/20/2018									
9/24/2018									
9/25/2018									
9/26/2018						116		144	86
9/27/2018									
10/1/2018	138	117	60	50	165				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-3I (bg)	YGWA-1D (bg)	YGWA-1I (bg)	YGWA-14S (bg)	YGWA-3D (bg)	YGWA-4I (bg)	YGWA-30I (bg)	YGWA-5D (bg)	YGWA-5I (bg)
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						111		142	83
4/4/2019									
6/12/2019									
9/24/2019		124	54					129	79
9/25/2019	159			64	157	117	51		
9/26/2019									
9/27/2019									
10/8/2019									
10/9/2019									
3/17/2020									
3/18/2020			35	57					
3/19/2020	148	116			146		47		
3/24/2020								139	68
3/25/2020						146			
3/26/2020									
9/22/2020						83		104	75
9/23/2020	155	108	15		157				
9/24/2020							51		
9/25/2020				54					
10/7/2020									
3/1/2021							23		
3/2/2021				67				52	67
3/3/2021	111	99	39		137	80			
3/4/2021									
8/19/2021		105	44	54	144		50		
8/20/2021									
8/25/2021									
8/26/2021						93		123	86
8/27/2021	155								
9/1/2021									
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
6/1/2016									
6/2/2016									
6/6/2016	58	120							
6/7/2016			38	60	28	130			
6/8/2016							66		
7/25/2016									
7/26/2016									
7/27/2016	35	94	74		74				
7/28/2016				81		119			
8/1/2016							56		
8/30/2016								1650	319
8/31/2016									
9/1/2016									
9/2/2016									
9/13/2016									
9/14/2016									
9/15/2016									
9/16/2016	35				67				
9/19/2016		92	45	68					
9/20/2016						132	53		
11/1/2016									
11/2/2016			53						
11/3/2016	48	104		61	41				
11/4/2016									
11/8/2016						146	58		
11/14/2016									280
11/15/2016									
11/16/2016								1420	
11/28/2016									
12/15/2016									
1/10/2017									
1/11/2017	95	133			104				
1/12/2017									
1/13/2017			46	76					
1/16/2017						194			
1/17/2017							56		
2/21/2017									
2/22/2017									
2/24/2017									162
2/27/2017								1640	
2/28/2017									
3/1/2017	79	119							
3/2/2017					77				
3/3/2017									
3/6/2017			164	167					
3/7/2017									
3/8/2017							192		
3/9/2017						288			
4/26/2017	36	162	34	50					
4/27/2017									
4/28/2017									
5/1/2017									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
5/2/2017					142	221	113		
5/8/2017									194
5/9/2017									
5/10/2017								1630	
5/26/2017									
6/27/2017									
6/28/2017	45	98							
6/29/2017			68	94	53				
6/30/2017									
7/7/2017							46		
7/10/2017						123			
7/11/2017								1800	193
7/13/2017									
7/17/2017									
9/22/2017									
9/29/2017									
10/3/2017				149					
10/4/2017	45		54		61				
10/5/2017		104					48		
10/6/2017									
10/10/2017									175
10/11/2017						100			
10/12/2017								1600	
10/16/2017									
11/20/2017									
11/21/2017									
1/10/2018									
1/11/2018									
1/12/2018									
2/19/2018									
2/20/2018									
4/2/2018									192
4/3/2018									
4/4/2018								1520	
6/5/2018				109					
6/6/2018			79						
6/7/2018		68							
6/8/2018									
6/11/2018	74				70				
6/12/2018						115	79		
6/13/2018									
6/27/2018									
6/28/2018									
8/6/2018									
8/7/2018									
9/19/2018									186
9/20/2018								1240	
9/24/2018									
9/25/2018	63	109	73	122	86				
9/26/2018							59		
9/27/2018						105			
10/1/2018									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWA-18S (bg)	YGWA-18I (bg)	YGWA-20S (bg)	YGWA-21I (bg)	YGWA-17S (bg)	YGWC-23S	YGWC-24SA	YGWC-42	YGWA-47 (bg)
10/2/2018									
2/25/2019									
3/26/2019									
3/27/2019								1100	170
3/28/2019									
3/29/2019									
4/1/2019									
4/2/2019				134	72				
4/3/2019	63	89	57						
4/4/2019						85	63		
6/12/2019									
9/24/2019				157					
9/25/2019			75		81				
9/26/2019	72	126					81		
9/27/2019						96			
10/8/2019									172
10/9/2019								1170	
3/17/2020									165
3/18/2020									
3/19/2020									
3/24/2020	59	91	76	117	71				
3/25/2020								1200	
3/26/2020						110	67		
9/22/2020									141
9/23/2020	81	103			99		87		
9/24/2020			69	113		129		1060	
9/25/2020									
10/7/2020									
3/1/2021									145
3/2/2021									
3/3/2021	37	95	53		57		70		
3/4/2021				110		96		501	
8/19/2021									134
8/20/2021									
8/25/2021						141		886	
8/26/2021	31								
8/27/2021		112	67		93				
9/1/2021				137			96		
9/3/2021									
9/27/2021									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
6/1/2016									
6/2/2016									
6/6/2016									
6/7/2016									
6/8/2016									
7/25/2016									
7/26/2016									
7/27/2016									
7/28/2016									
8/1/2016									
8/30/2016									
8/31/2016	80	209							
9/1/2016			228						
9/2/2016				243					
9/13/2016									
9/14/2016					152				
9/15/2016									
9/16/2016									
9/19/2016									
9/20/2016									
11/1/2016									
11/2/2016									
11/3/2016									
11/4/2016					148				
11/8/2016									
11/14/2016				272					
11/15/2016			211						
11/16/2016	112								
11/28/2016		102							
12/15/2016					191				
1/10/2017									
1/11/2017									
1/12/2017									
1/13/2017									
1/16/2017					180				
1/17/2017									
2/21/2017									
2/22/2017		164							
2/24/2017	147								
2/27/2017			382						
2/28/2017				306					
3/1/2017									
3/2/2017									
3/3/2017					156				
3/6/2017									
3/7/2017									
3/8/2017									
3/9/2017									
4/26/2017									
4/27/2017									
4/28/2017					130				
5/1/2017									

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
5/2/2017									
5/8/2017		145							
5/9/2017			154	303					
5/10/2017	203								
5/26/2017					223				
6/27/2017									
6/28/2017					166				
6/29/2017									
6/30/2017									
7/7/2017									
7/10/2017									
7/11/2017	238								
7/13/2017			192	282					
7/17/2017		185							
9/22/2017				309					
9/29/2017				273					
10/3/2017					153				
10/4/2017									
10/5/2017									
10/6/2017				287					
10/10/2017									
10/11/2017			177	264		68			
10/12/2017	287						1360	636	74
10/16/2017		218							
11/20/2017						139	1390		179
11/21/2017								706	
1/10/2018									140
1/11/2018						153		701	
1/12/2018							1400		
2/19/2018		173						630	119
2/20/2018						87	1300		
4/2/2018									
4/3/2018						85	1390	660	106
4/4/2018	292		174						
6/5/2018									
6/6/2018									
6/7/2018					146				
6/8/2018									
6/11/2018									
6/12/2018									
6/13/2018				292					
6/27/2018								575	
6/28/2018						88	1310		112
8/6/2018		158							
8/7/2018						89	1340	574	103
9/19/2018									
9/20/2018	434		186						
9/24/2018						82	1400	588	107
9/25/2018									
9/26/2018				277					
9/27/2018									
10/1/2018					155				

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 10/29/2021 8:45 AM View: Appendix III

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	GWA-2 (bg)	YGWC-49	YGWC-36A	YGWA-2I (bg)	YGWA-39 (bg)	YGWC-38	YGWC-41	YGWA-40 (bg)
10/2/2018									
2/25/2019		92							
3/26/2019									90
3/27/2019						75	1190		
3/28/2019	323		164					372	
3/29/2019					150				
4/1/2019									
4/2/2019									
4/3/2019									
4/4/2019				240					
6/12/2019		226							
9/24/2019					146				
9/25/2019									
9/26/2019			192	198					
9/27/2019									
10/8/2019		276							
10/9/2019	501					119	1100	440	98
3/17/2020		185							
3/18/2020									
3/19/2020					148				
3/24/2020									84
3/25/2020	352		130	164		158	883	428	
3/26/2020									
9/22/2020		281							
9/23/2020					161				
9/24/2020			187			170			77
9/25/2020	494						664	307	
10/7/2020				137					
3/1/2021									
3/2/2021		296							
3/3/2021					138				
3/4/2021	592		145	69		168	600	224	57
8/19/2021									
8/20/2021		254							
8/25/2021									
8/26/2021						249	562	225	
8/27/2021					150				
9/1/2021			163						
9/3/2021				89					88
9/27/2021	158								

FIGURE E.

Appendix III Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:54 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-40 (bg)	-0.01963	-52	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-38	-4.078	-69	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-41	-2.814	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-42	-1.625	-50	-48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-43	0.6926	63	48	Yes	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-47 (bg)	-0.000923	-50	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-17S (bg)	0.12	74	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-18S (bg)	-0.07527	-79	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-21I (bg)	1.218	82	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-5D (bg)	-2.169	-74	-63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-38	-30.34	-77	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWC-42	-11.96	-57	-48	Yes	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-47 (bg)	-1.845	-69	-48	Yes	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	GWA-2 (bg)	4.423	71	53	Yes	15	6.667	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1D (bg)	0.7142	68	63	Yes	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-1I (bg)	-0.1058	-73	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-17S (bg)	0.4027	92	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-20S (bg)	0.1782	82	63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-5D (bg)	-0.8704	-97	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-47 (bg)	-0.4824	-58	-48	Yes	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3D (bg)	-0.05961	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-3I (bg)	-0.05007	-72	-63	Yes	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWC-24SA	0.4915	68	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-39 (bg)	-3.378	-51	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-40 (bg)	-10.75	-65	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5D (bg)	-3.658	-104	-63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-5I (bg)	0.09609	85	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-38	-158	-80	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWC-42	-111.4	-62	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-47 (bg)	-21.6	-78	-48	Yes	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GWA-2 (bg)	23.3	74	53	Yes	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-1D (bg)	1.025	88	63	Yes	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-3D (bg)	0.4885	74	63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-40 (bg)	-16.17	-53	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-5D (bg)	-17	-86	-63	Yes	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-38	-210	-61	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-41	-126.2	-73	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWC-42	-167.8	-67	-48	Yes	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-47 (bg)	-15.69	-67	-48	Yes	14	0	n/a	n/a	0.01	NP

Appendix III Trend Tests - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:54 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	YGWA-17S (bg)	0	1	63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18I (bg)	0	-30	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-18S (bg)	0	0	63	No	17	17.65	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-20S (bg)	0	-13	-63	No	17	88.24	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-21I (bg)	-0.005469	-53	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-39 (bg)	0.004253	27	48	No	14	7.143	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWA-40 (bg)**	**-0.01963**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	YGWA-4I (bg)	0	-11	-63	No	17	64.71	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5D (bg)	0.0001974	14	63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-5I (bg)	0	-39	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron (mg/L)	YGWC-23S	-0.0679	-30	-63	No	17	0	n/a	n/a	0.01	NP
Boron (mg/L)	**YGWC-38**	**-4.078**	**-69**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-41**	**-2.814**	**-57**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-42**	**-1.625**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWC-43**	**0.6926**	**63**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**YGWA-47 (bg)**	**-0.000923**	**-50**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GWA-2 (bg)	0	11	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-14S (bg)	-0.0008768	-36	-63	No	17	11.76	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1D (bg)	0.00007668	10	63	No	17	29.41	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-1I (bg)	0	-18	-63	No	17	70.59	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-2I (bg)	0	-14	-63	No	17	76.47	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-30I (bg)	0	-25	-63	No	17	82.35	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3D (bg)	0	-1	-63	No	17	58.82	n/a	n/a	0.01	NP
Boron (mg/L)	YGWA-3I (bg)	0	-21	-63	No	17	88.24	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-17S (bg)**	**0.12**	**74**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-18I (bg)	0.02122	10	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-18S (bg)**	**-0.07527**	**-79**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-20S (bg)	0.06963	56	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-21I (bg)**	**1.218**	**82**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-39 (bg)	0.6588	26	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-40 (bg)	-0.8022	-47	-48	No	14	7.143	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-4I (bg)	0.2132	21	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-5D (bg)**	**-2.169**	**-74**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-5I (bg)	0.07389	58	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWC-38**	**-30.34**	**-77**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWC-42**	**-11.96**	**-57**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-47 (bg)**	**-1.845**	**-69**	**-48**	**Yes**	**14**	**7.143**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GWA-2 (bg)**	**4.423**	**71**	**53**	**Yes**	**15**	**6.667**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-14S (bg)	-0.01957	-45	-63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**YGWA-1D (bg)**	**0.7142**	**68**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**YGWA-1I (bg)**	**-0.1058**	**-73**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	YGWA-2I (bg)	0.3107	22	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-30I (bg)	0	0	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3D (bg)	0.5989	46	63	No	17	0	n/a	n/a	0.01	NP
Calcium (mg/L)	YGWA-3I (bg)	0.5549	41	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-17S (bg)**	**0.4027**	**92**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-18I (bg)	0.06344	47	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-18S (bg)	0.2062	62	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-20S (bg)**	**0.1782**	**82**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	YGWA-21I (bg)	-0.1349	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-39 (bg)	0.3996	26	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-40 (bg)	0.2116	37	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-4I (bg)	0.1004	41	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-5D (bg)**	**-0.8704**	**-97**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III Trend Tests - All Results

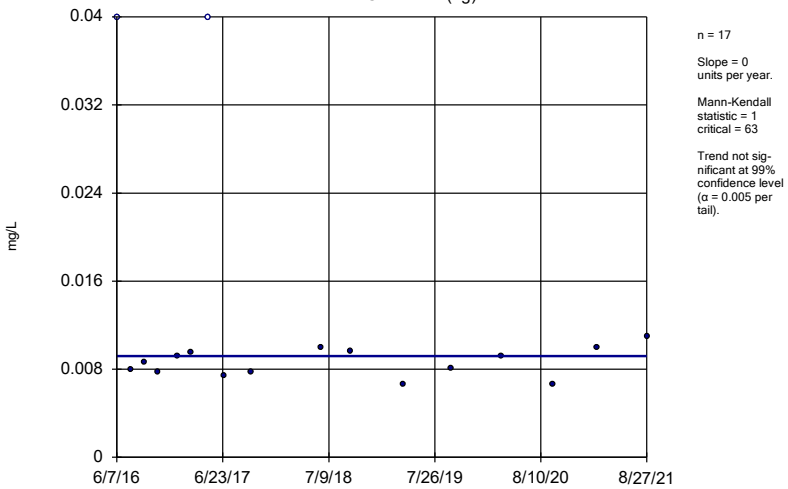
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 8:54 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	YGWA-5I (bg)	0	-3	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-47 (bg)**	**-0.4824**	**-58**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GWA-2 (bg)	0.1877	43	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-14S (bg)	0.1776	42	63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1D (bg)	-0.002869	-40	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-1I (bg)	-0.02701	-41	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-2I (bg)	-0.04401	-47	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	YGWA-30I (bg)	-0.02202	-32	-63	No	17	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**YGWA-3D (bg)**	**-0.05961**	**-72**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWA-3I (bg)**	**-0.05007**	**-72**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**YGWC-24SA**	**0.4915**	**68**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-17S (bg)	0.1098	59	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18I (bg)	-0.1768	-60	-63	No	17	23.53	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-18S (bg)	-0.1647	-50	-63	No	17	11.76	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-20S (bg)	0	30	63	No	17	64.71	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-21I (bg)	-0.1968	-22	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-39 (bg)**	**-3.378**	**-51**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-40 (bg)**	**-10.75**	**-65**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-4I (bg)	0.1495	44	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-5D (bg)**	**-3.658**	**-104**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-5I (bg)**	**0.09609**	**85**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-38**	**-158**	**-80**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWC-42**	**-111.4**	**-62**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**YGWA-47 (bg)**	**-21.6**	**-78**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GWA-2 (bg)**	**23.3**	**74**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-14S (bg)	0.08247	21	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-1D (bg)**	**1.025**	**88**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-1I (bg)	-0.2433	-23	-63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-2I (bg)	0.4455	27	63	No	17	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	YGWA-30I (bg)	-0.07072	-31	-63	No	17	11.76	n/a	n/a	0.01	NP
Sulfate (mg/L)	**YGWA-3D (bg)**	**0.4885**	**74**	**63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	YGWA-3I (bg)	1.181	61	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-17S (bg)	5.4	32	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18I (bg)	-1.272	-13	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-18S (bg)	0.4413	9	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-20S (bg)	3.135	31	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-21I (bg)	13.94	56	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-39 (bg)	25.58	41	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-40 (bg)**	**-16.17**	**-53**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-4I (bg)	0.3992	4	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWA-5D (bg)**	**-17**	**-86**	**-63**	**Yes**	**17**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	YGWA-5I (bg)	0	-1	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**YGWC-38**	**-210**	**-61**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-41**	**-126.2**	**-73**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWC-42**	**-167.8**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**YGWA-47 (bg)**	**-15.69**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GWA-2 (bg)	25.14	48	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-14S (bg)	1.46	17	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1D (bg)	0.915	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-1I (bg)	-3.586	-32	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-2I (bg)	-2.761	-35	-63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-30I (bg)	1.885	20	63	No	17	11.76	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3D (bg)	1.346	10	63	No	17	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	YGWA-3I (bg)	1.702	14	63	No	17	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 63

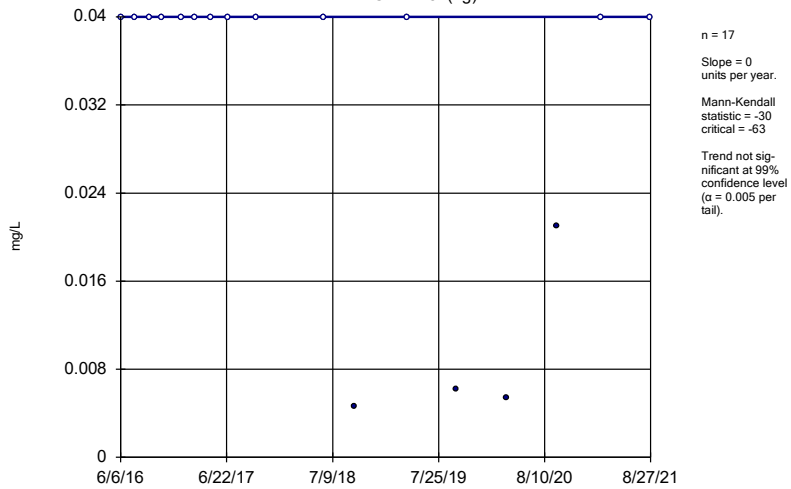
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -30
critical = -63

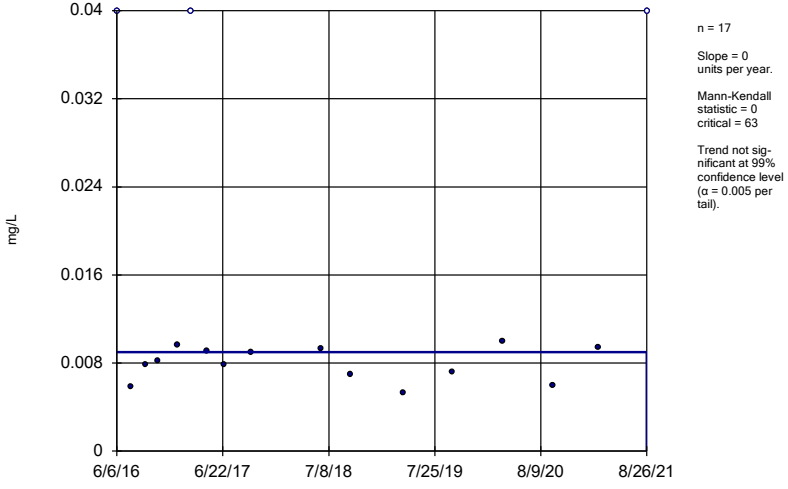
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 63

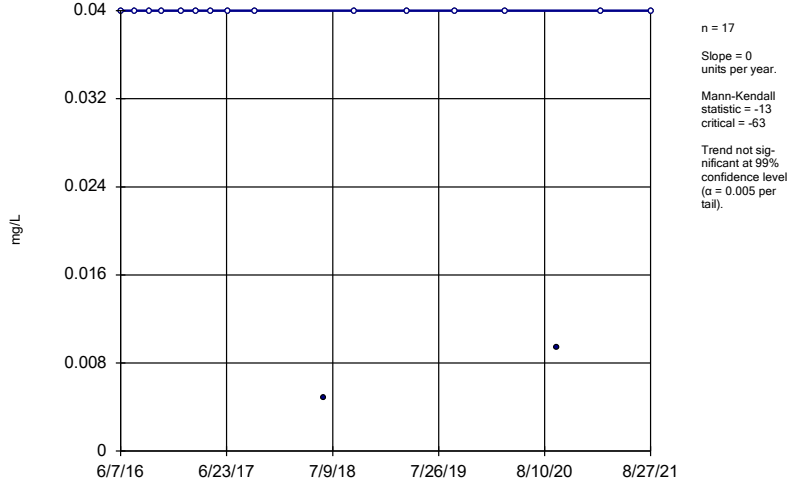
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -13
critical = -63

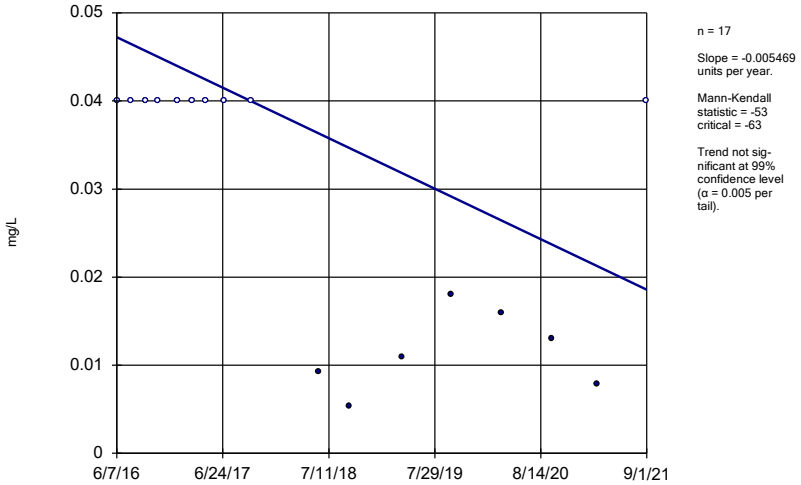
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = -0.005469 units per year.

Mann-Kendall statistic = -53
critical = -63

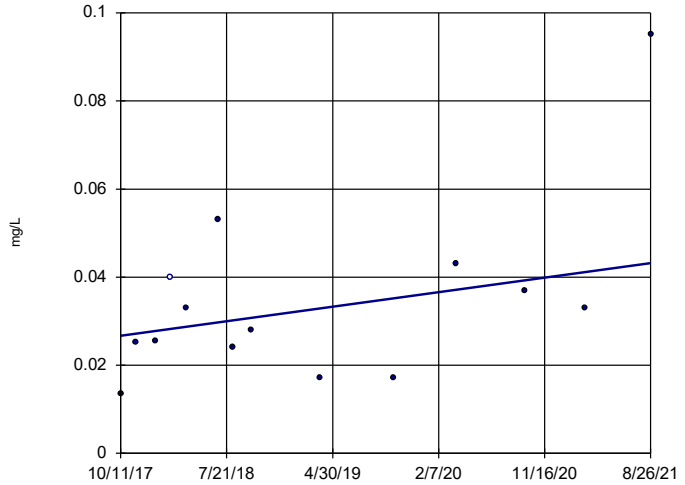
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 0.004253 units per year.

Mann-Kendall statistic = 27
critical = 48

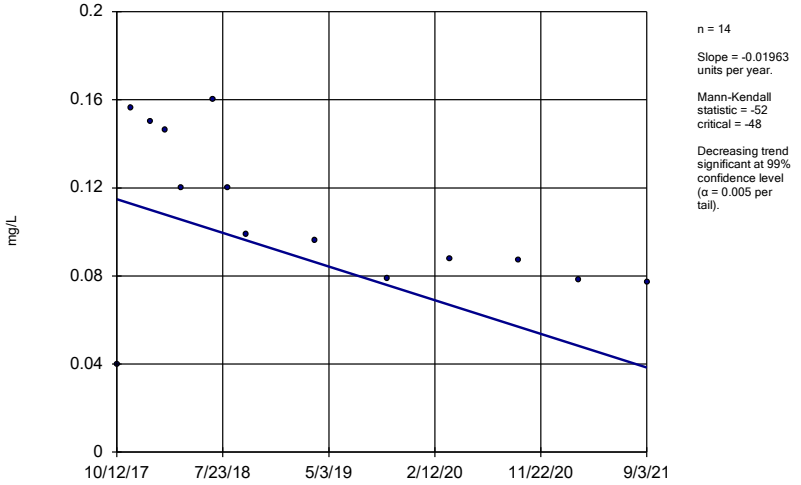
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = -0.01963 units per year.

Mann-Kendall statistic = -52
critical = -48

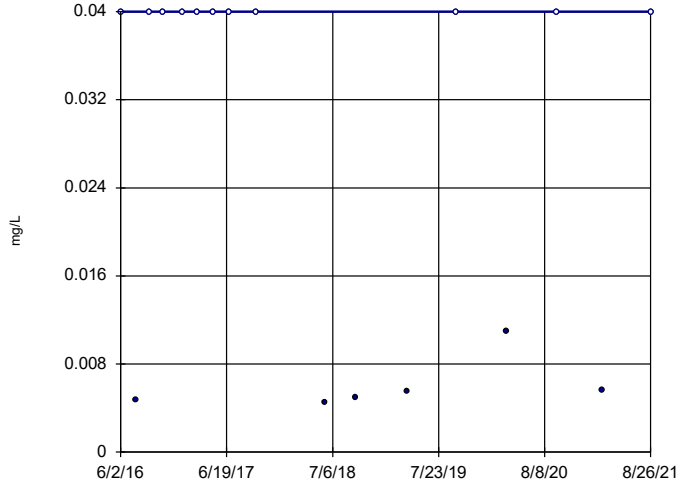
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -63

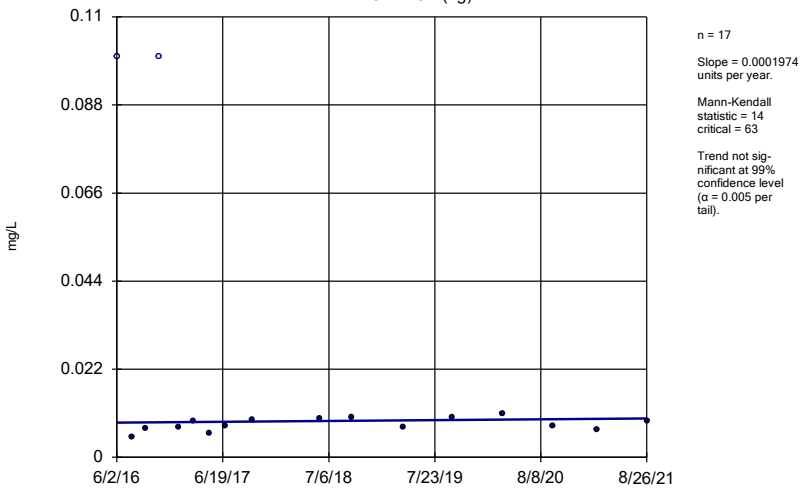
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = 0.0001974 units per year.

Mann-Kendall statistic = 14
critical = 63

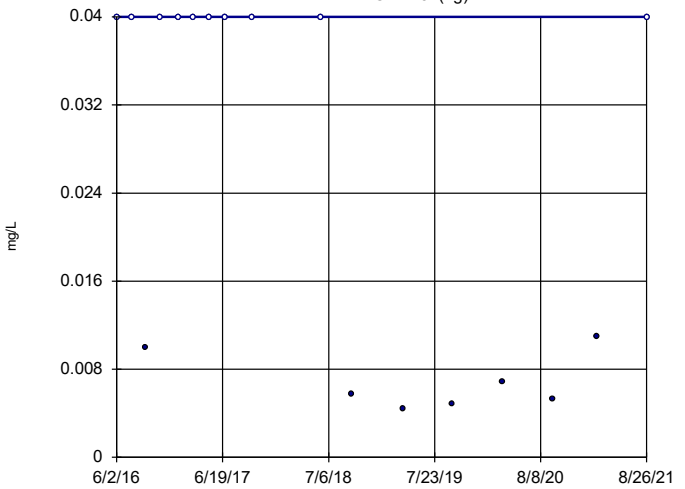
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -39
critical = -63

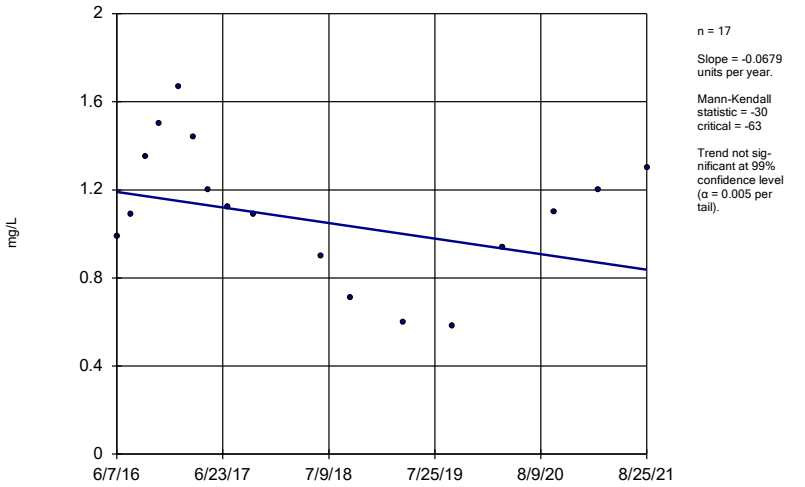
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-23S



n = 17

Slope = -0.0679 units per year.

Mann-Kendall statistic = -30
critical = -63

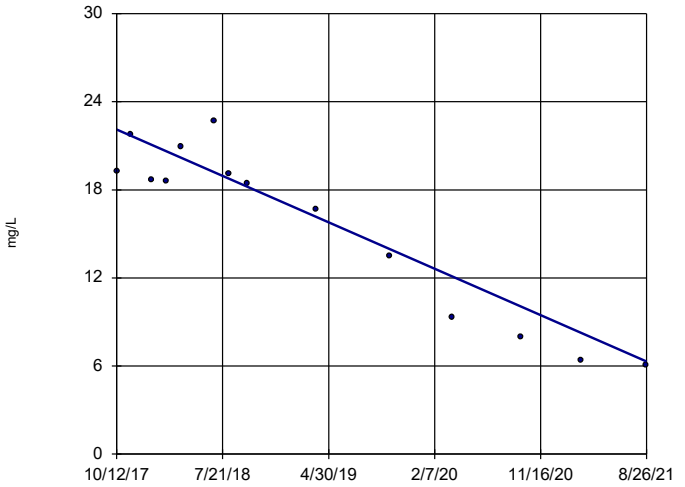
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 14

Slope = -4.078 units per year.

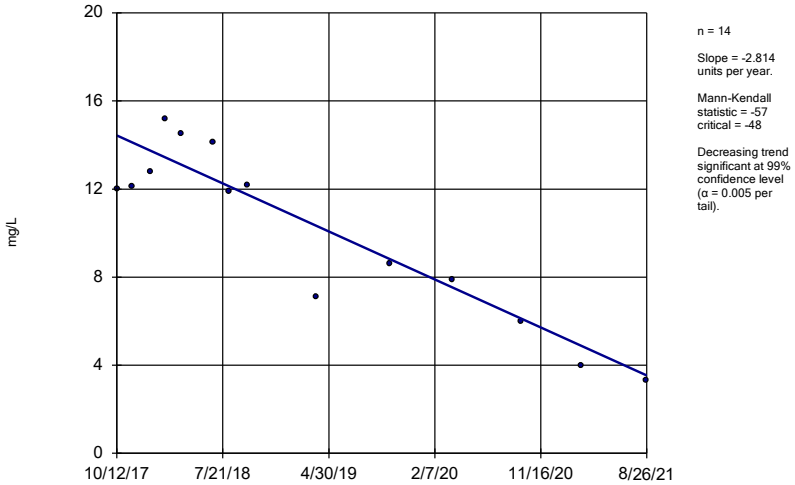
Mann-Kendall statistic = -69
critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-41



n = 14

Slope = -2.814 units per year.

Mann-Kendall statistic = -57
critical = -48

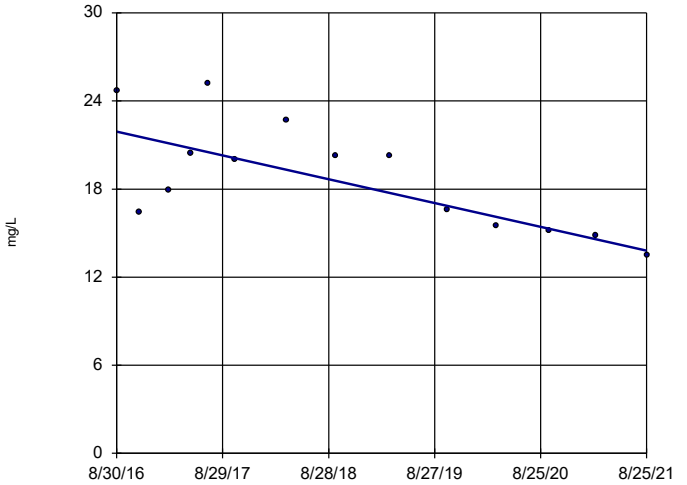
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 14

Slope = -1.625 units per year.

Mann-Kendall statistic = -50
critical = -48

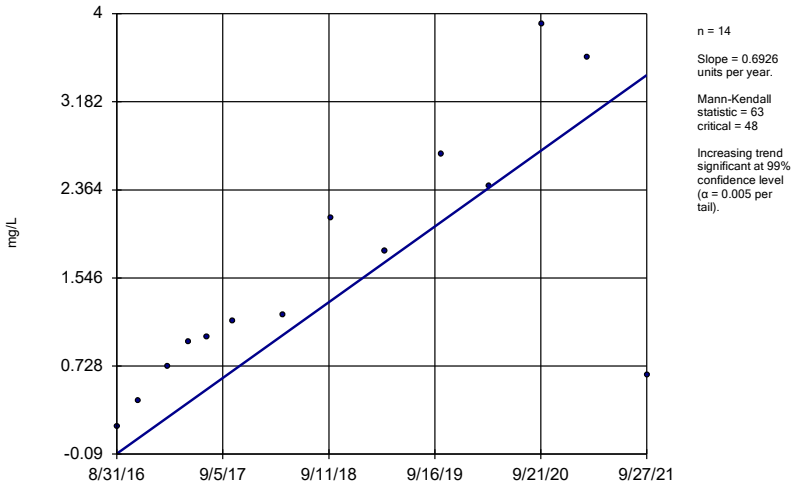
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-43



n = 14

Slope = 0.6926 units per year.

Mann-Kendall statistic = 63
critical = 48

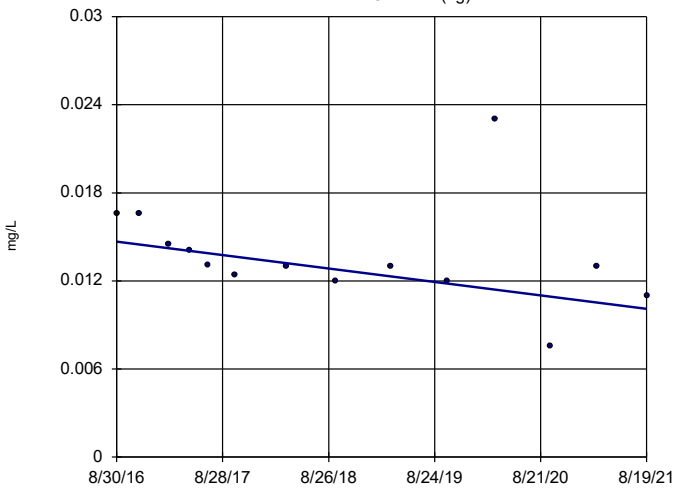
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -0.000923 units per year.

Mann-Kendall statistic = -50
critical = -48

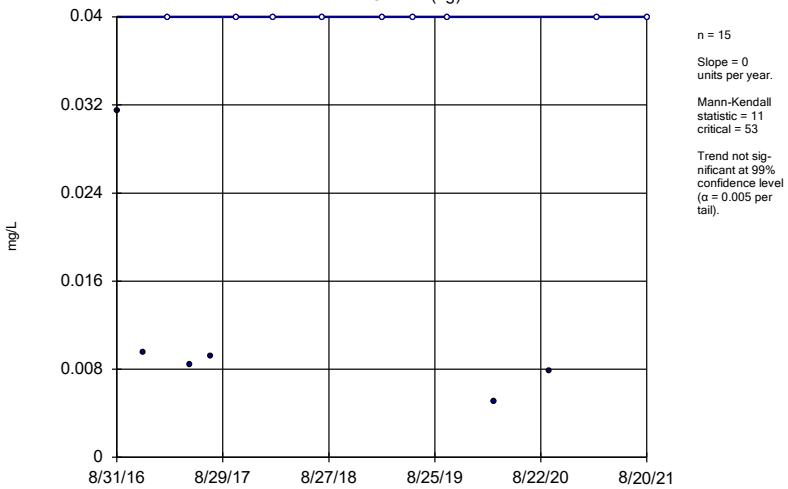
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 0
units per year.

Mann-Kendall
statistic = 11
critical = 53

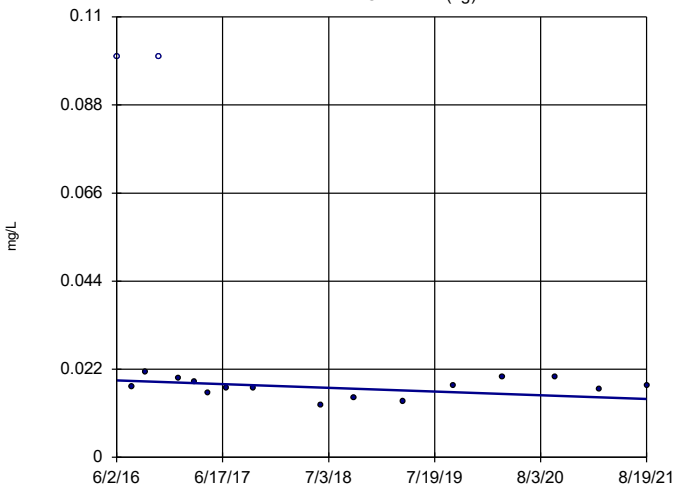
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = -0.0008768
units per year.

Mann-Kendall
statistic = -36
critical = -63

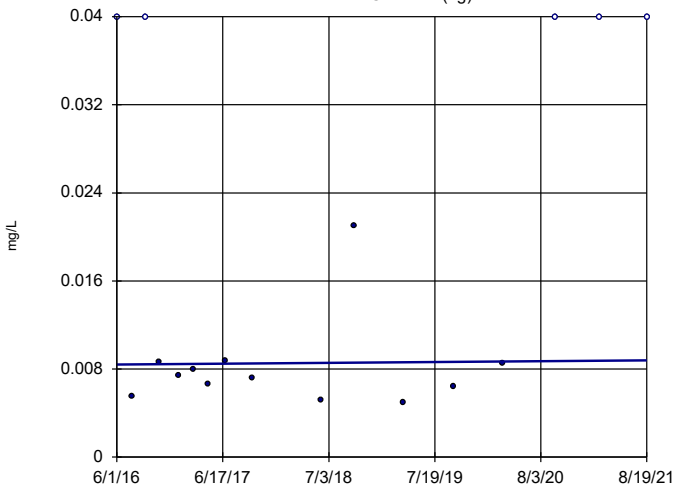
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = 0.00007668
units per year.

Mann-Kendall
statistic = 10
critical = 63

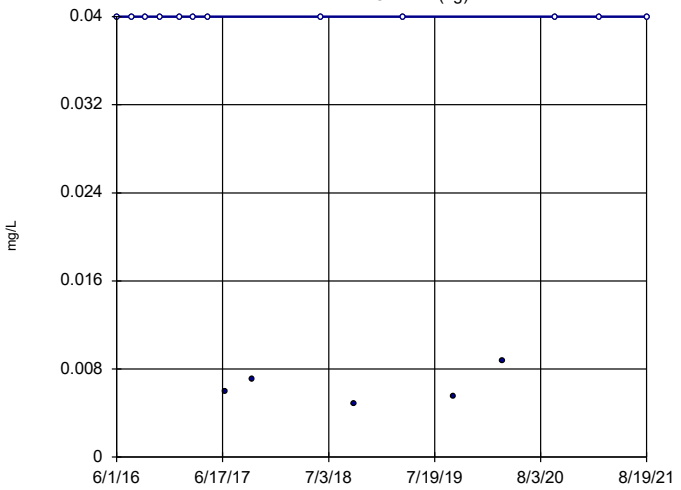
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = 0
units per year.

Mann-Kendall
statistic = -18
critical = -63

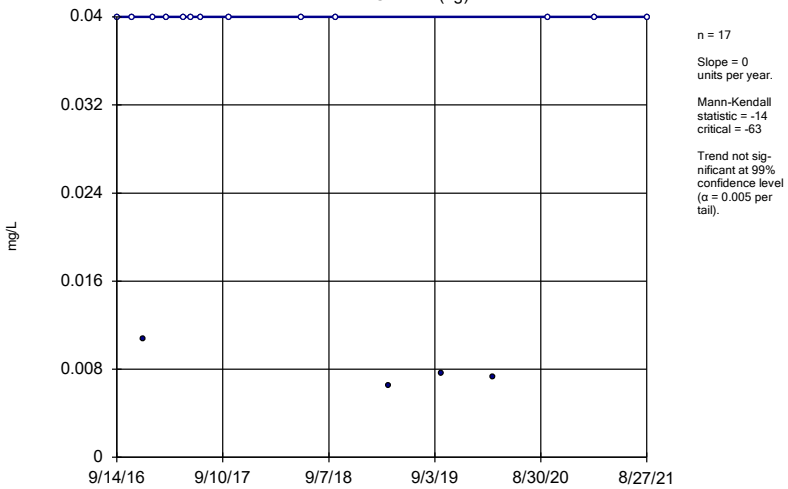
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -14
critical = -63

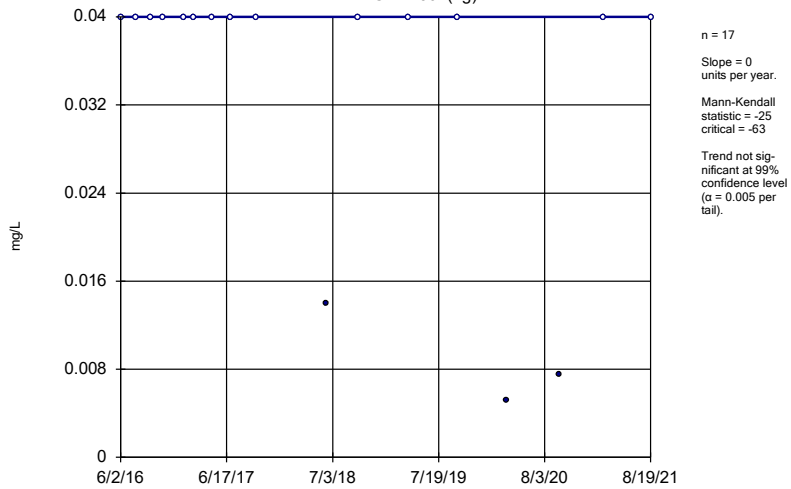
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -25
critical = -63

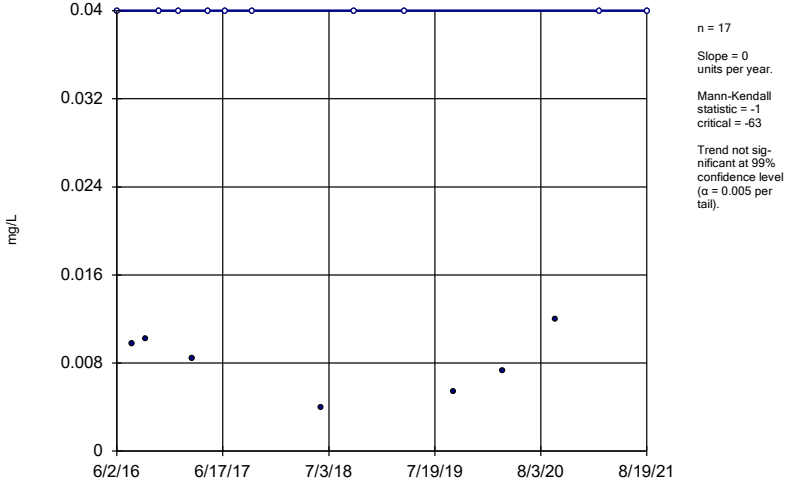
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -1
critical = -63

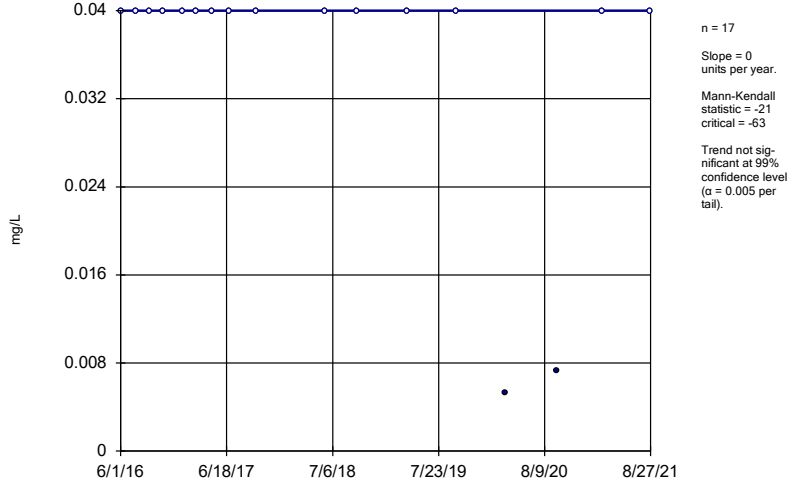
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = 0 units per year.

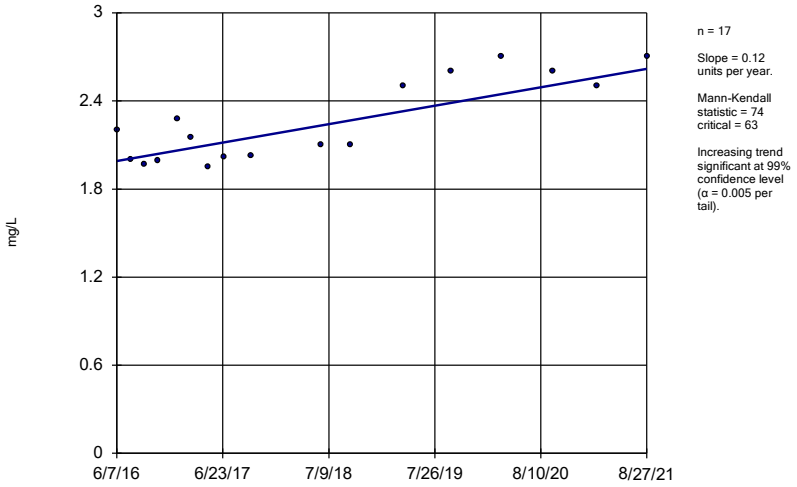
Mann-Kendall statistic = -21
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 0.12 units per year.

Mann-Kendall statistic = 74
critical = 63

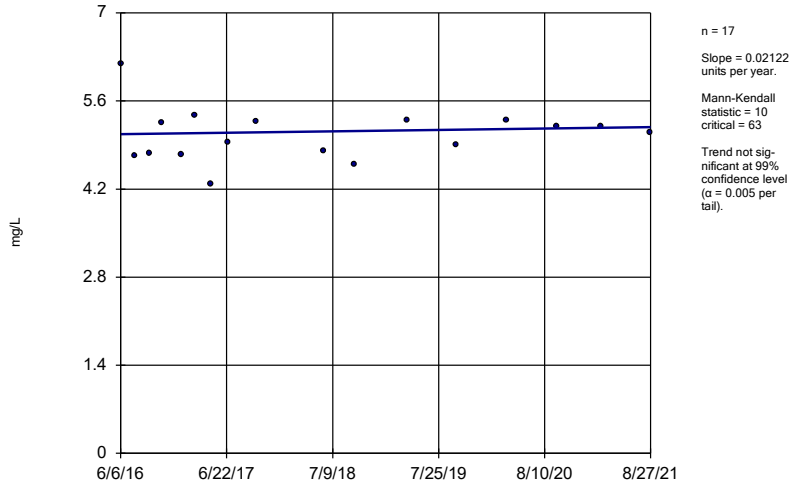
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = 0.02122 units per year.

Mann-Kendall statistic = 10
critical = 63

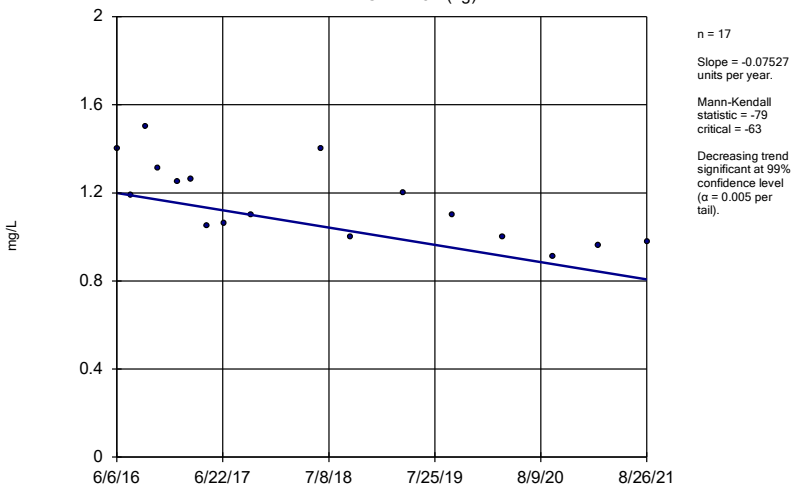
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = -0.07527 units per year.

Mann-Kendall statistic = -79
critical = -63

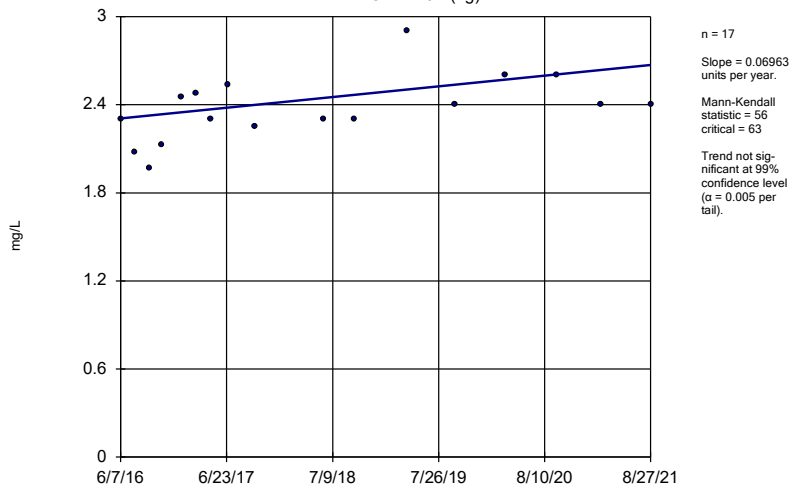
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0.06963 units per year.

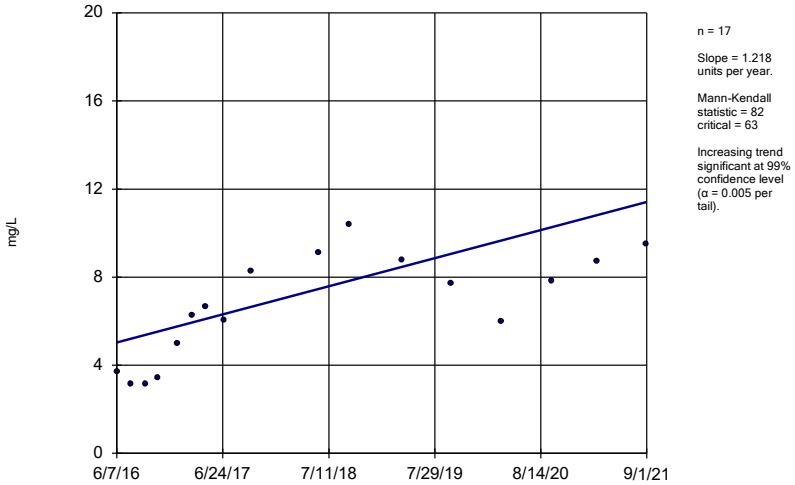
Mann-Kendall statistic = 56
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = 1.218 units per year.

Mann-Kendall statistic = 82 critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

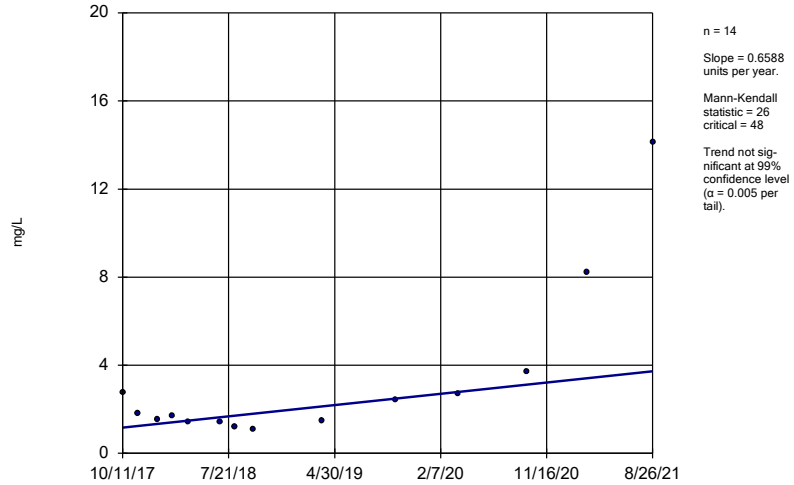
Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 0.6588 units per year.

Mann-Kendall statistic = 26 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests

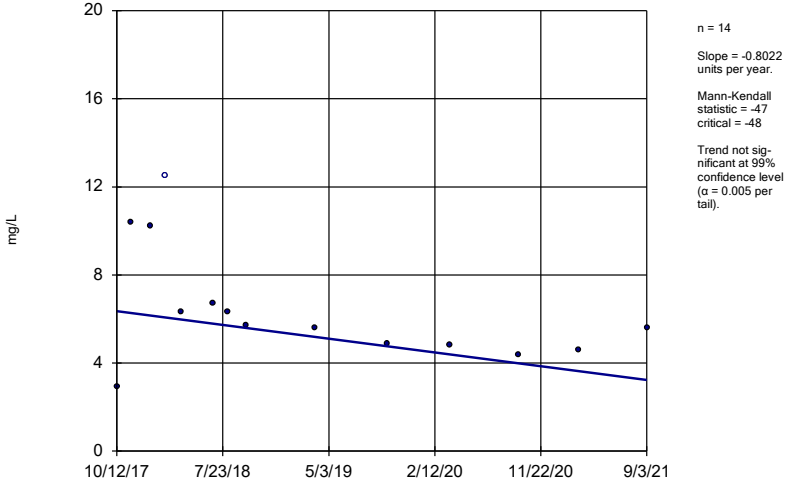
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = -0.8022 units per year.

Mann-Kendall statistic = -47 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

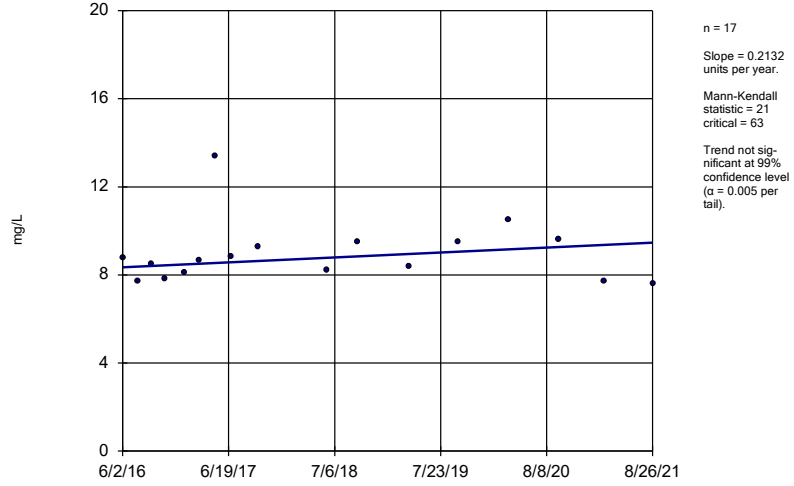
Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.2132 units per year.

Mann-Kendall statistic = 21 critical = 63

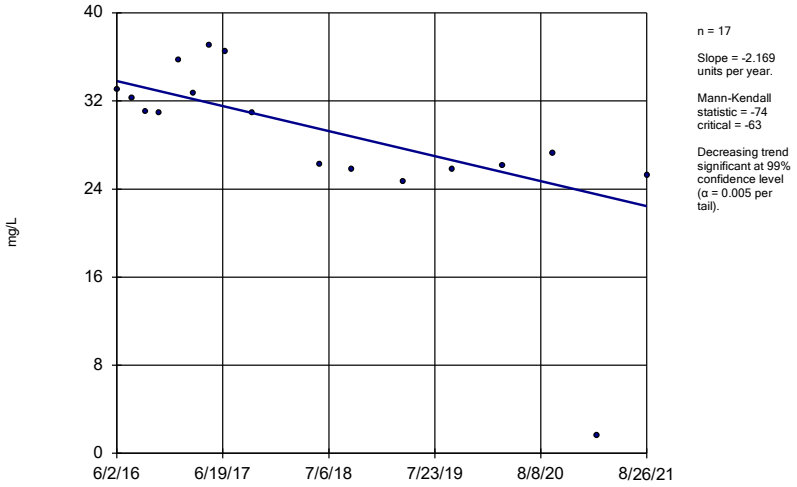
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:52 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = -2.169 units per year.

Mann-Kendall statistic = -74
critical = -63

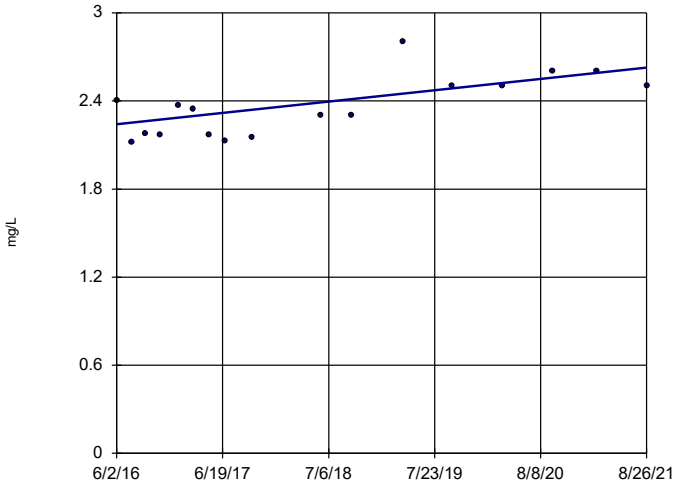
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0.07389 units per year.

Mann-Kendall statistic = 58
critical = 63

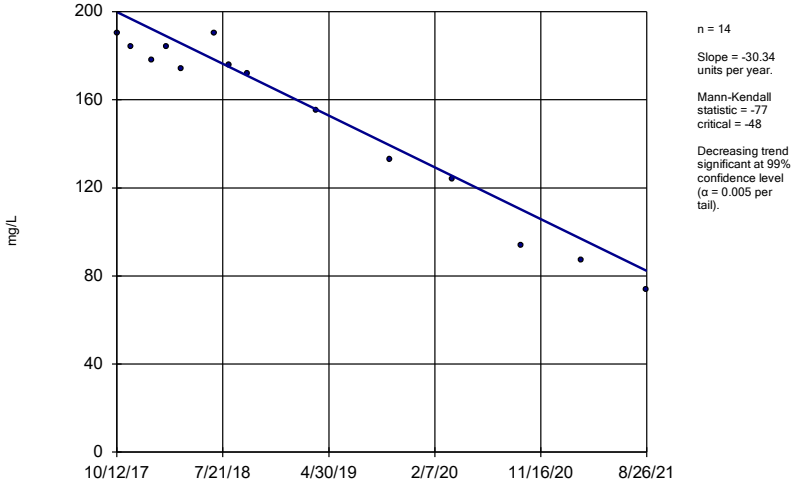
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 14

Slope = -30.34 units per year.

Mann-Kendall statistic = -77
critical = -48

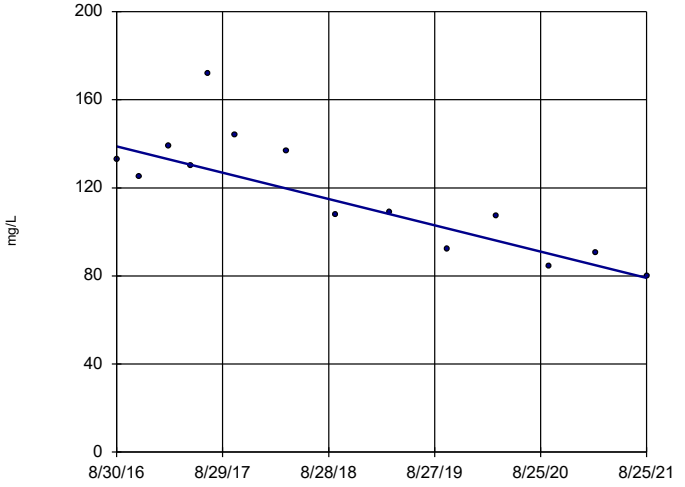
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 14

Slope = -11.96 units per year.

Mann-Kendall statistic = -57
critical = -48

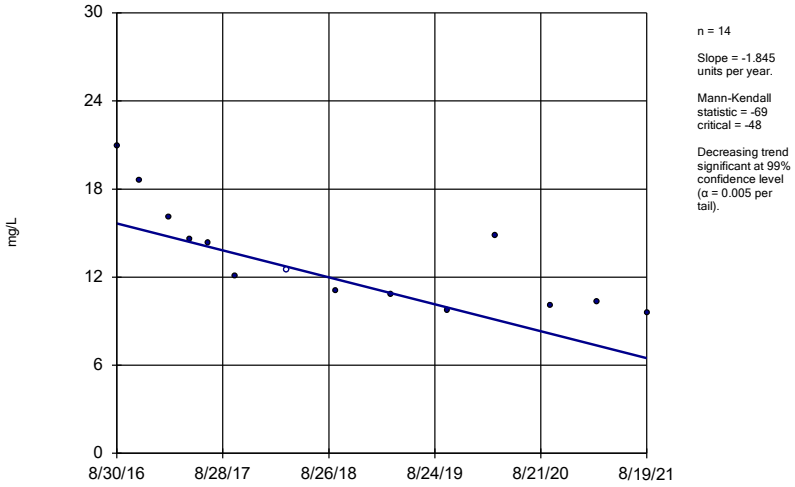
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -1.845 units per year.

Mann-Kendall statistic = -69
critical = -48

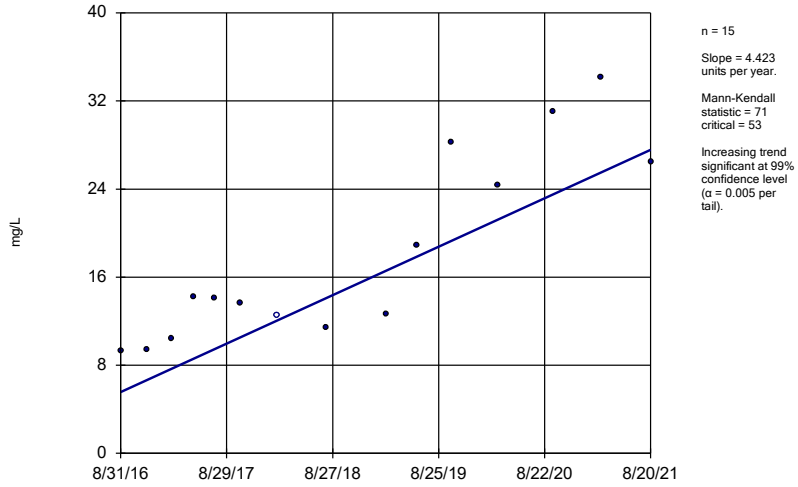
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 4.423 units per year.

Mann-Kendall statistic = 71
critical = 53

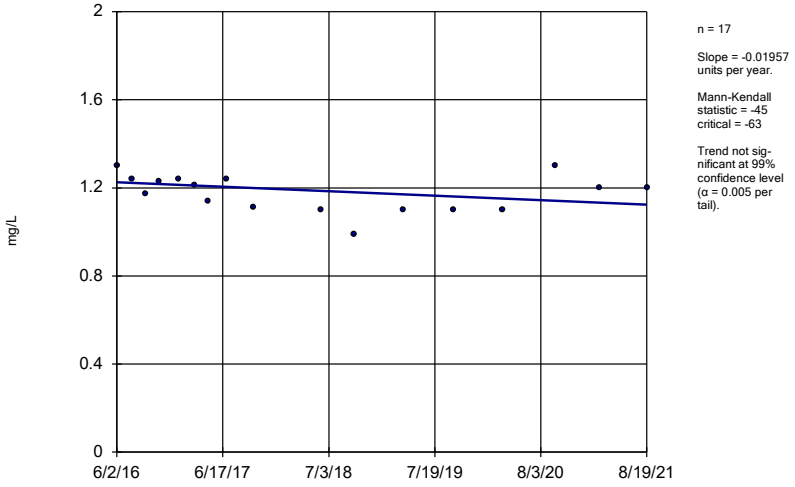
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = -0.01957 units per year.

Mann-Kendall statistic = -45
critical = -63

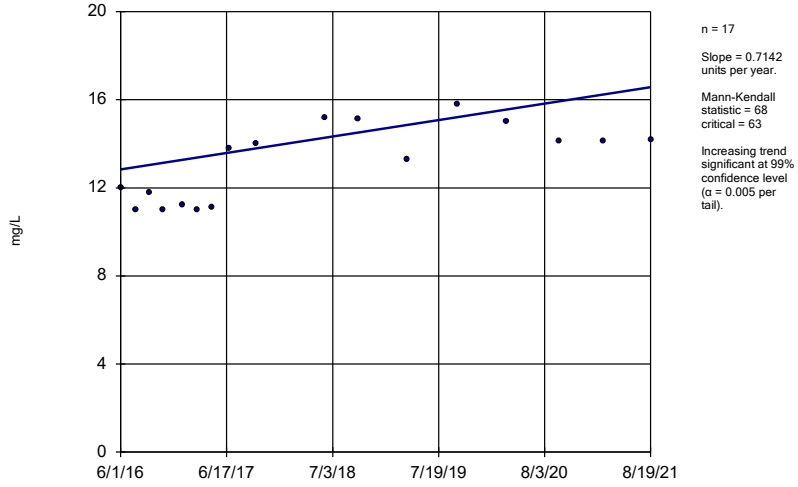
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = 0.7142 units per year.

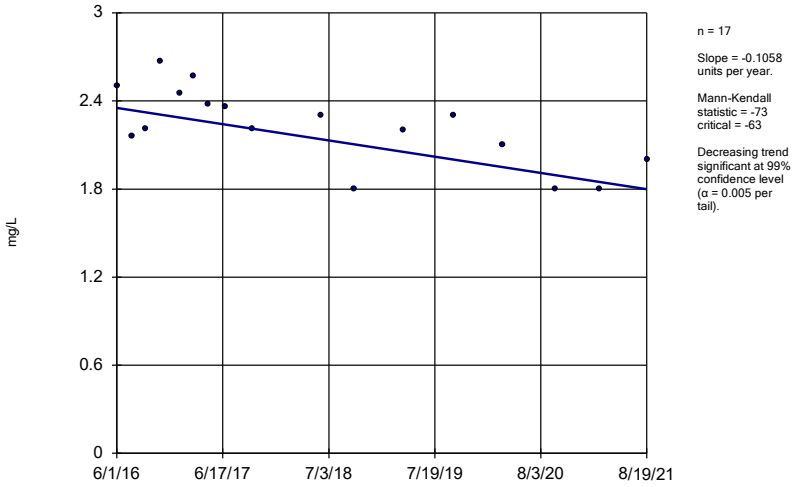
Mann-Kendall statistic = 68
critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = -0.1058 units per year.

Mann-Kendall statistic = -73 critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

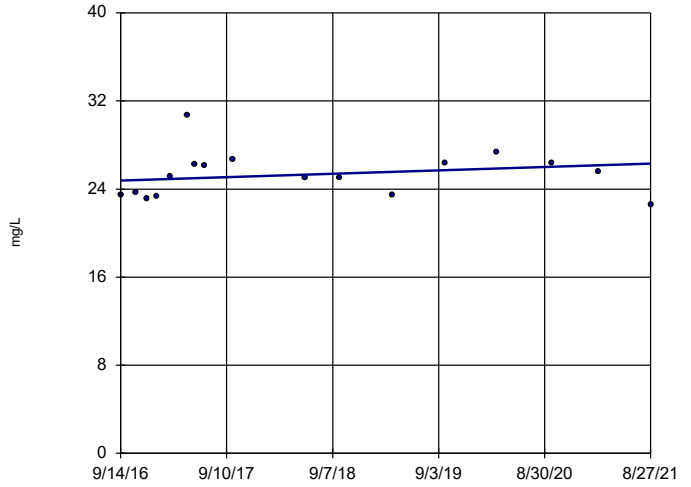
Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 17

Slope = 0.3107 units per year.

Mann-Kendall statistic = 22 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

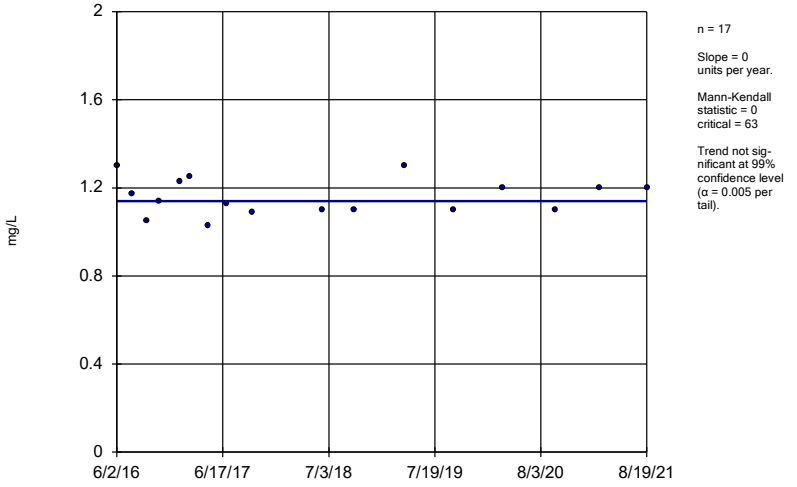
Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

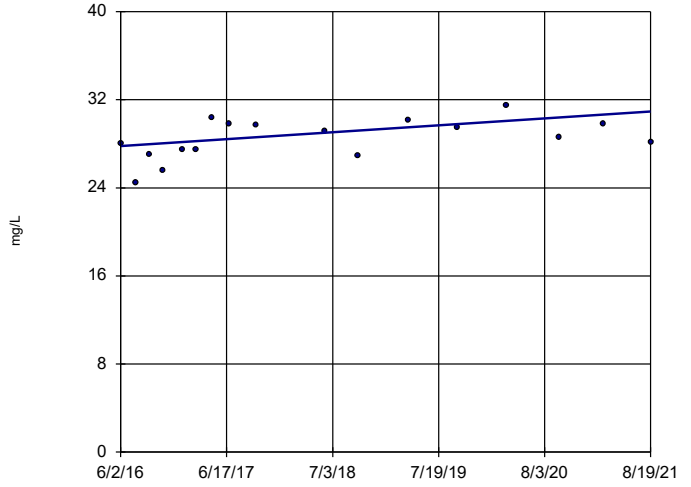
Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 17

Slope = 0.5989 units per year.

Mann-Kendall statistic = 46 critical = 63

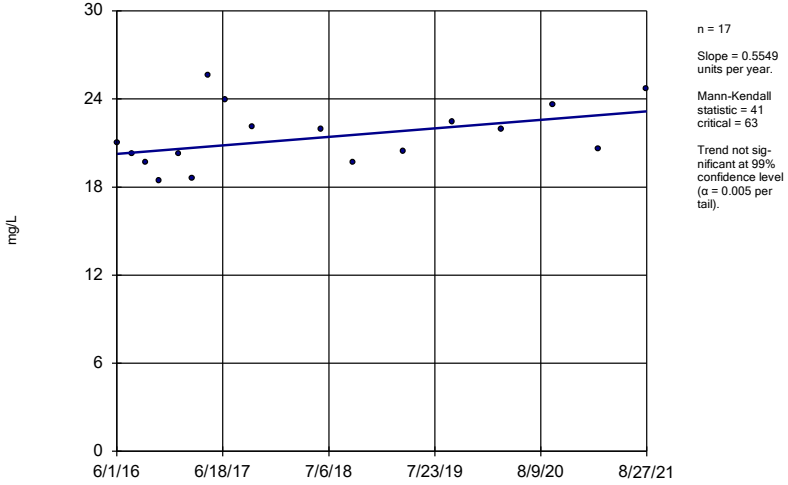
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = 0.5549 units per year.

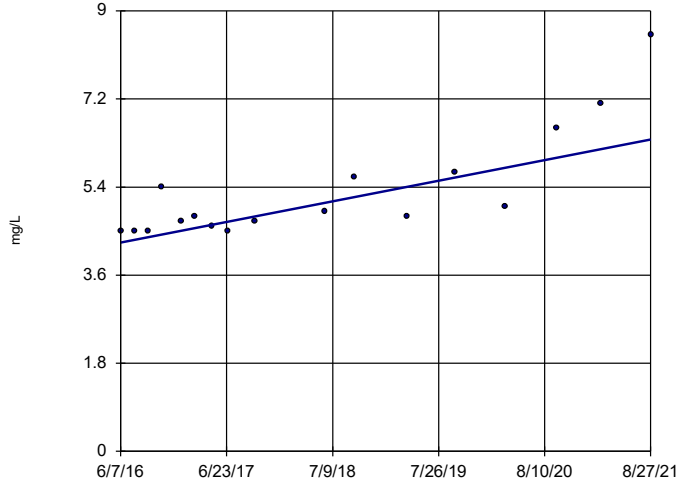
Mann-Kendall statistic = 41
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 0.4027 units per year.

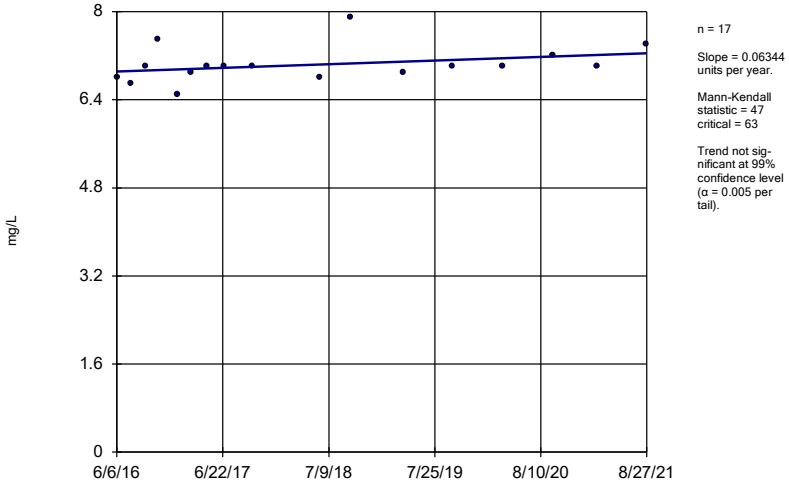
Mann-Kendall statistic = 92
critical = 63

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = 0.06344 units per year.

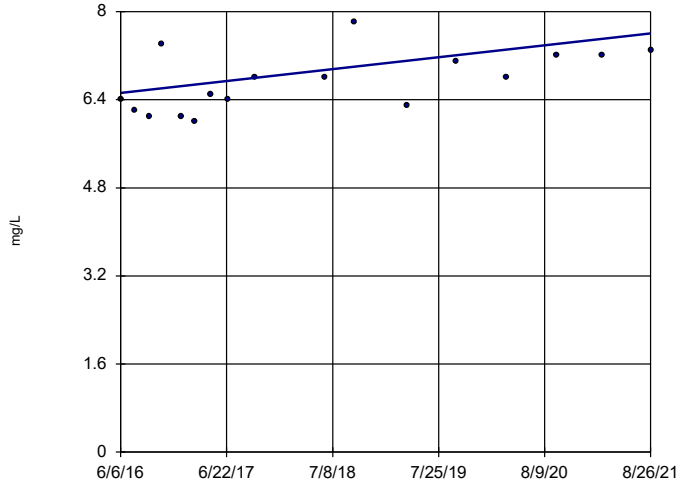
Mann-Kendall statistic = 47
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = 0.2062 units per year.

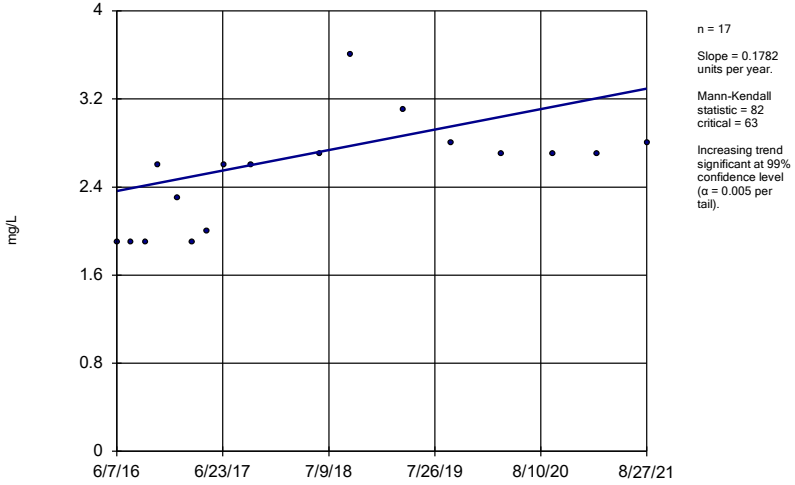
Mann-Kendall statistic = 62
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0.1782 units per year.

Mann-Kendall statistic = 82 critical = 63

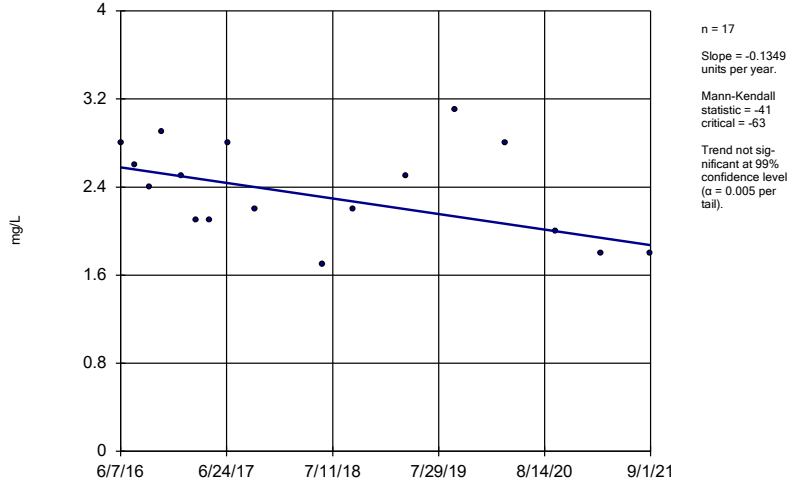
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = -0.1349 units per year.

Mann-Kendall statistic = -41 critical = -63

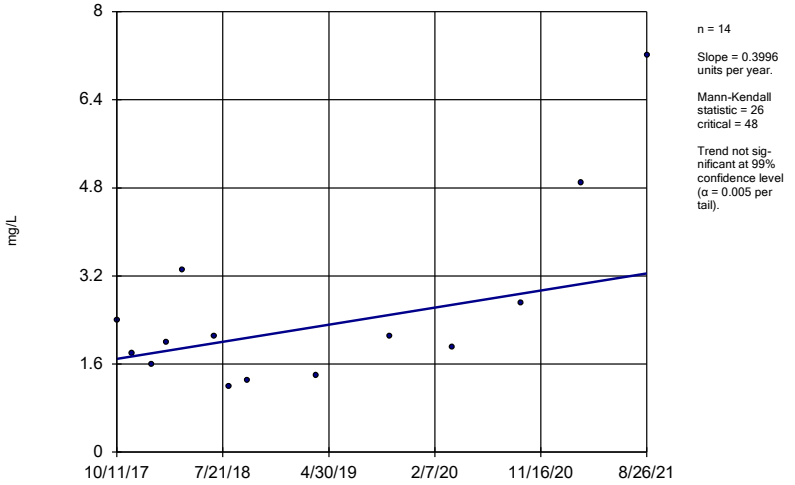
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 0.3996 units per year.

Mann-Kendall statistic = 26 critical = 48

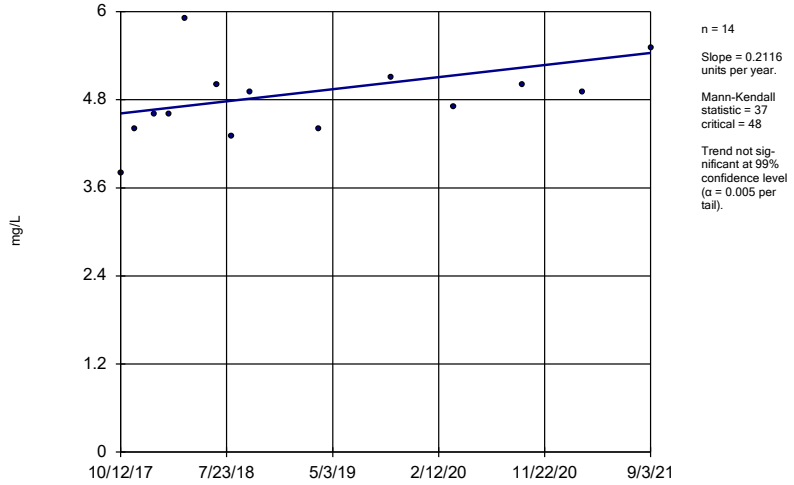
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = 0.2116 units per year.

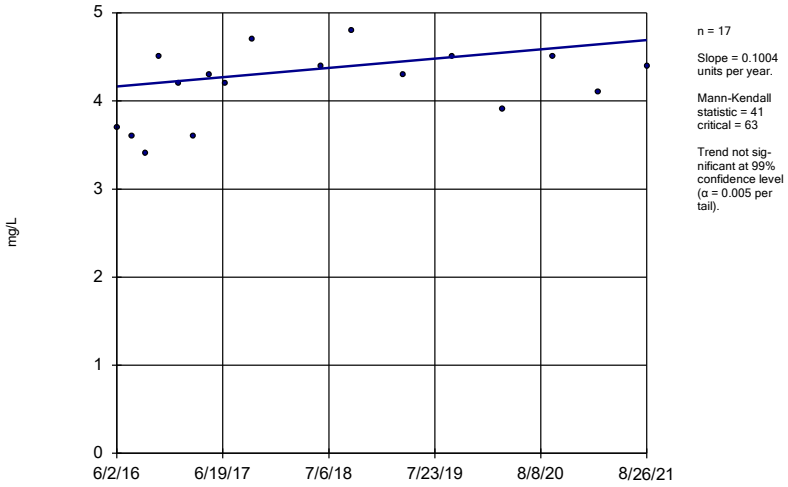
Mann-Kendall statistic = 37 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.1004 units per year.

Mann-Kendall statistic = 41
critical = 63

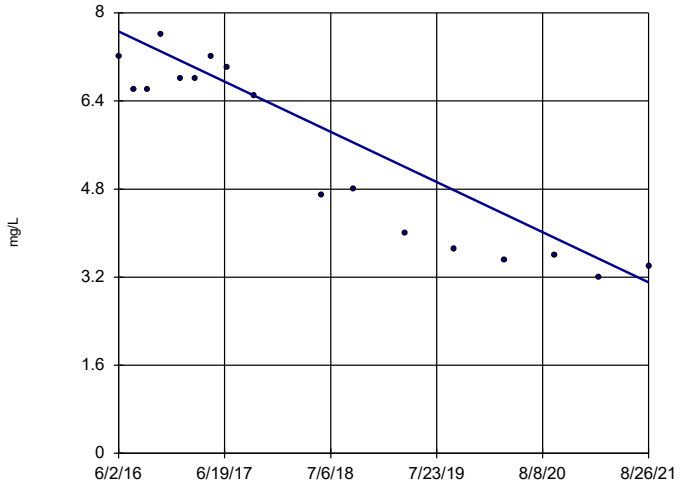
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = -0.8704 units per year.

Mann-Kendall statistic = -97
critical = -63

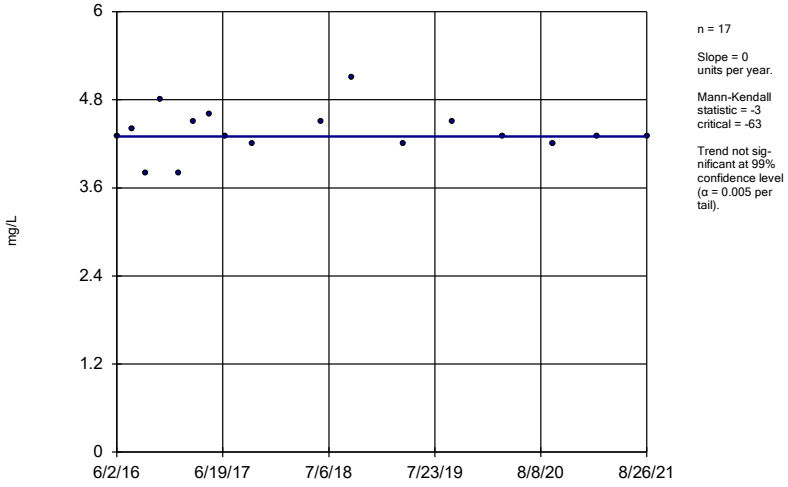
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0 units per year.

Mann-Kendall statistic = -3
critical = -63

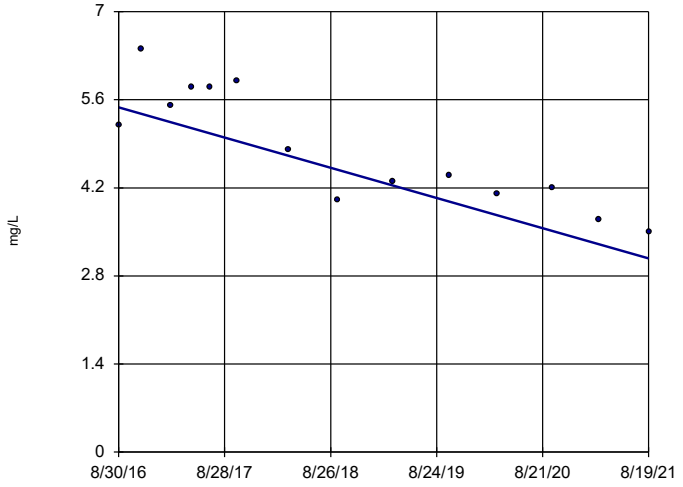
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -0.4824 units per year.

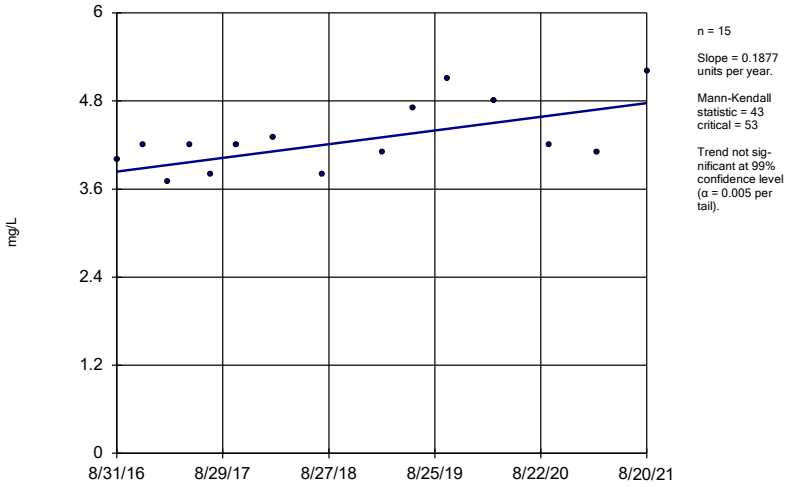
Mann-Kendall statistic = -58
critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 0.1877 units per year.

Mann-Kendall statistic = 43
critical = 53

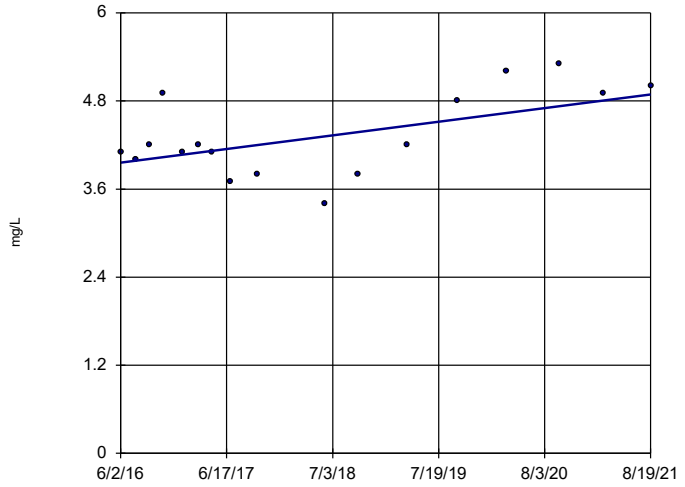
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = 0.1776 units per year.

Mann-Kendall statistic = 42
critical = 63

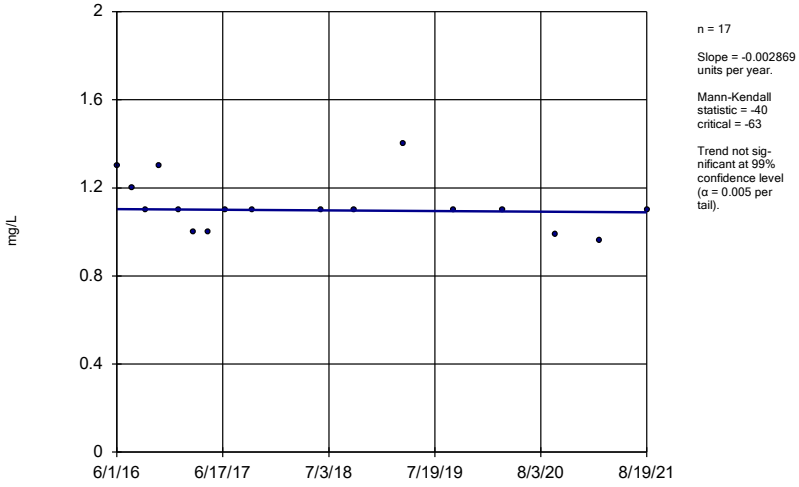
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = -0.002869 units per year.

Mann-Kendall statistic = -40
critical = -63

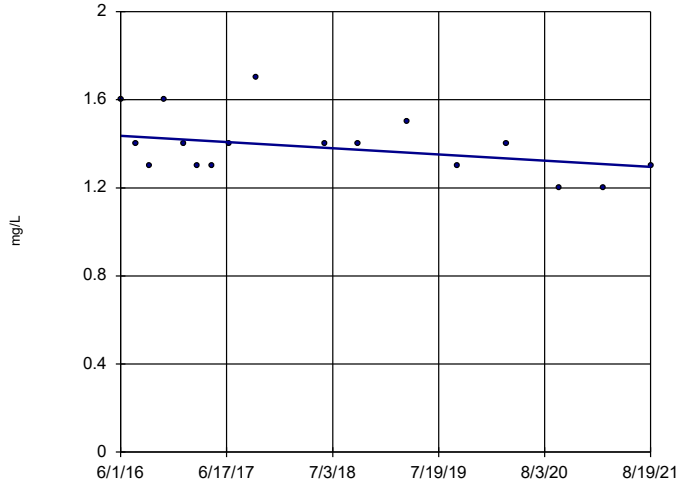
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = -0.02701 units per year.

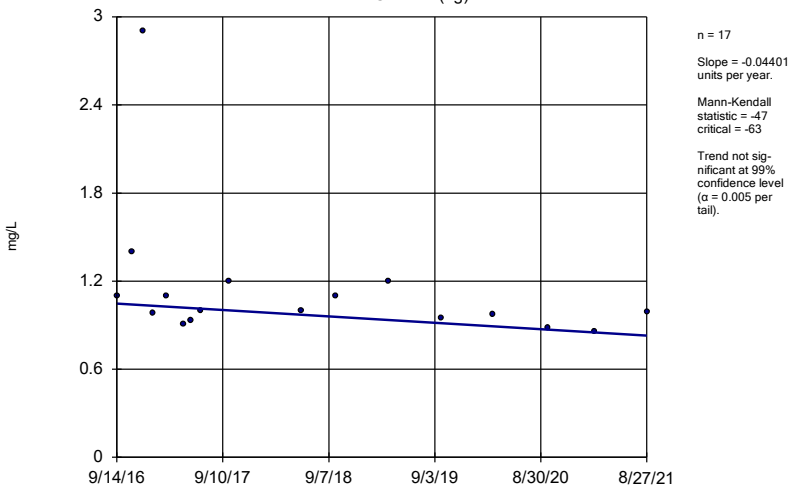
Mann-Kendall statistic = -41
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-2I (bg)



n = 17

Slope = -0.04401 units per year.

Mann-Kendall statistic = -47
critical = -63

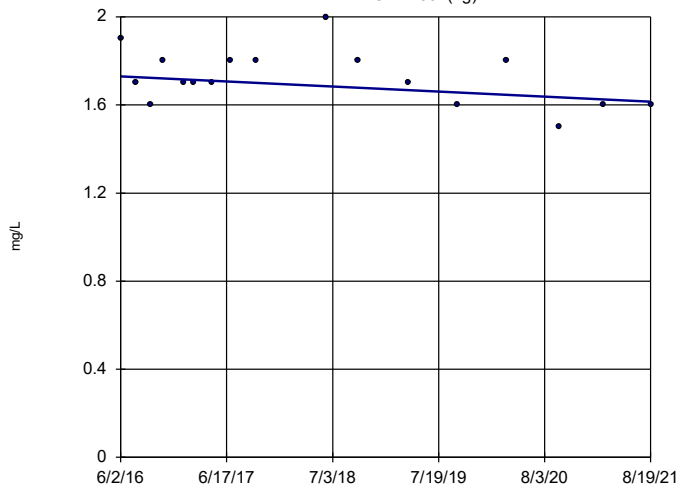
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = -0.02202 units per year.

Mann-Kendall statistic = -32
critical = -63

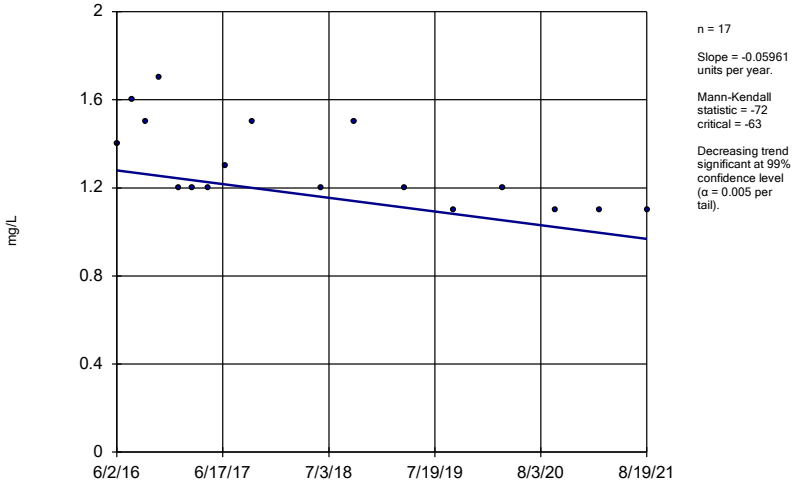
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 17

Slope = -0.05961 units per year.

Mann-Kendall statistic = -72
critical = -63

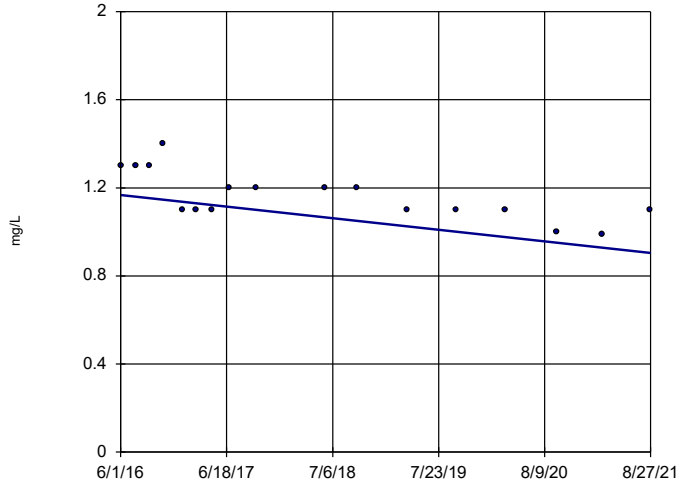
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = -0.05007 units per year.

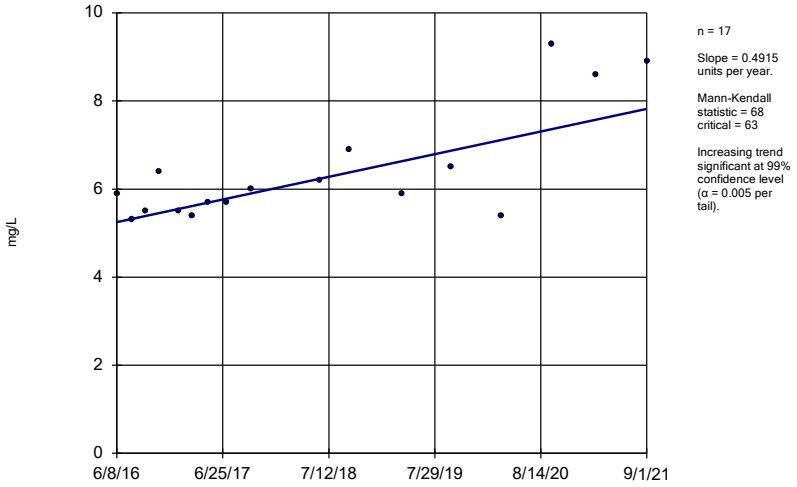
Mann-Kendall statistic = -72
critical = -63

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-24SA



n = 17

Slope = 0.4915 units per year.

Mann-Kendall statistic = 68
critical = 63

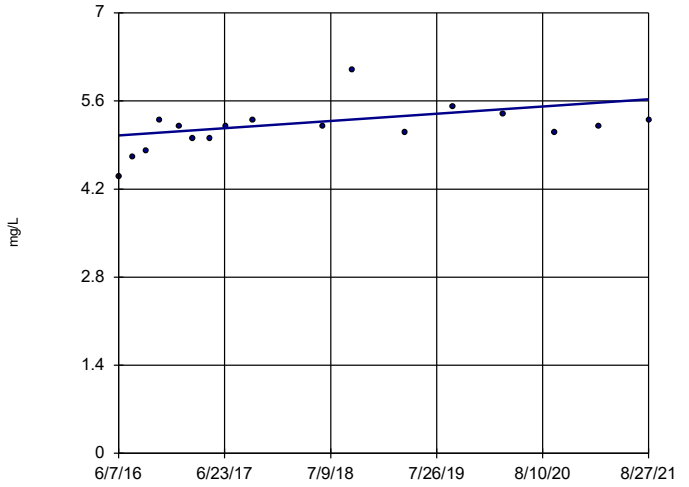
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 0.1098 units per year.

Mann-Kendall statistic = 59
critical = 63

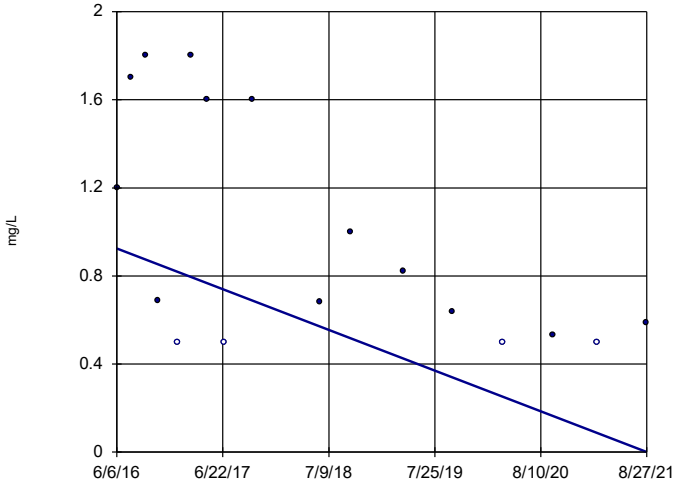
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = -0.1768 units per year.

Mann-Kendall statistic = -60
critical = -63

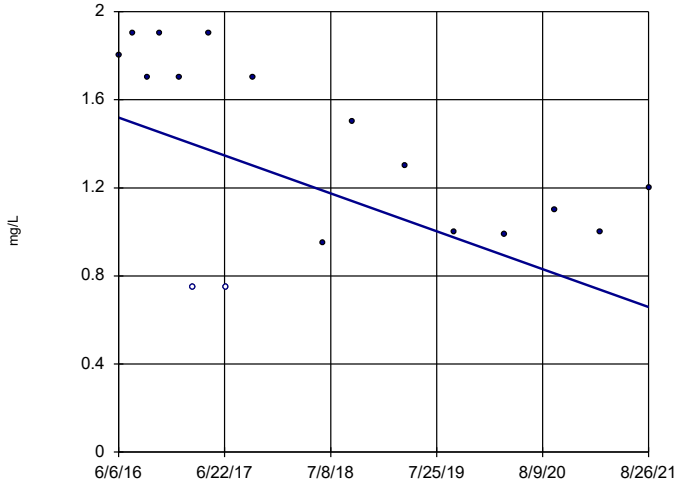
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = -0.1647 units per year.

Mann-Kendall statistic = -50
critical = -63

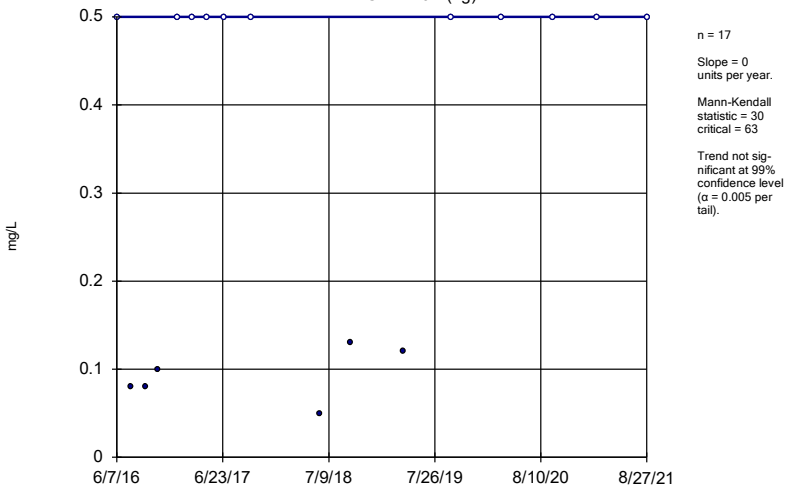
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 0 units per year.

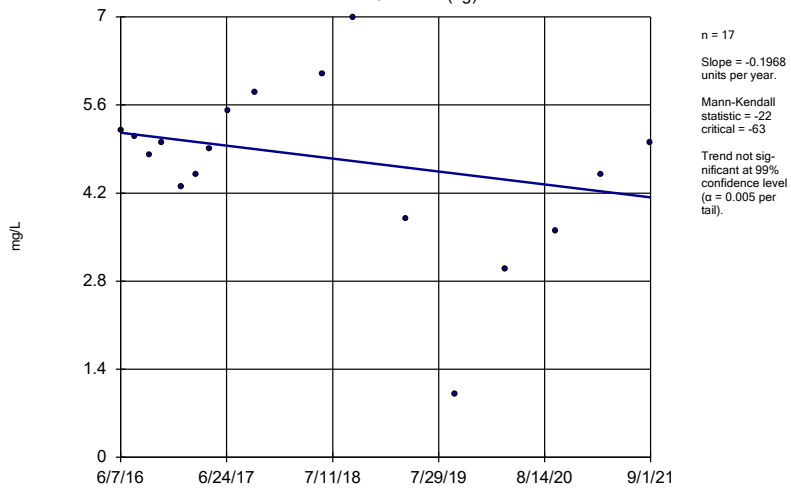
Mann-Kendall statistic = 30 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = -0.1968 units per year.

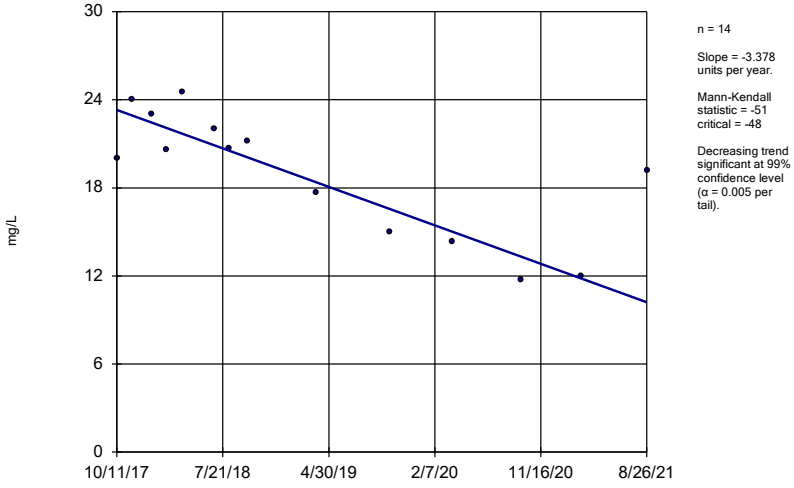
Mann-Kendall statistic = -22 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = -3.378 units per year.

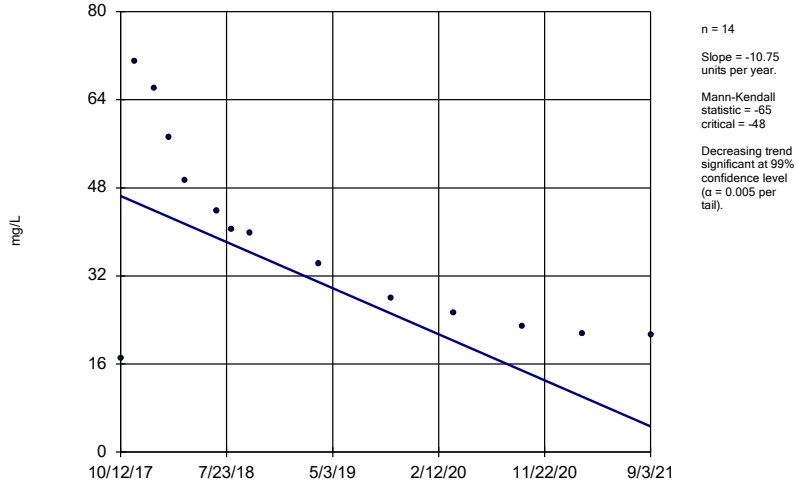
Mann-Kendall statistic = -51 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = -10.75 units per year.

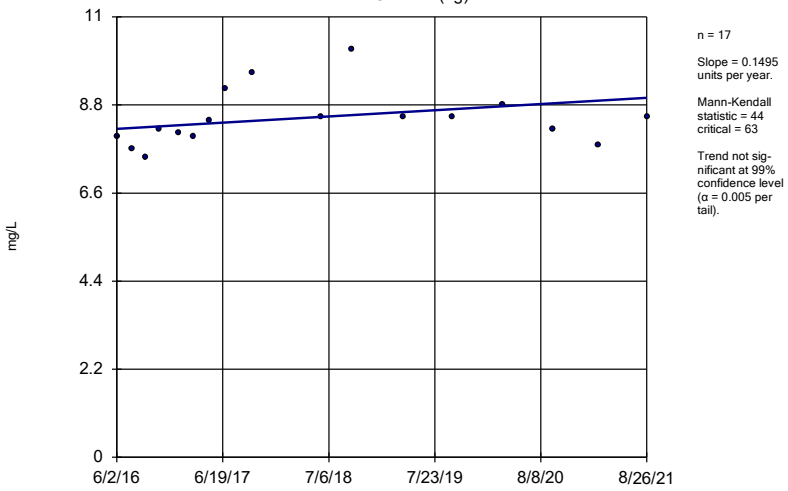
Mann-Kendall statistic = -65 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.1495 units per year.

Mann-Kendall statistic = 44
critical = 63

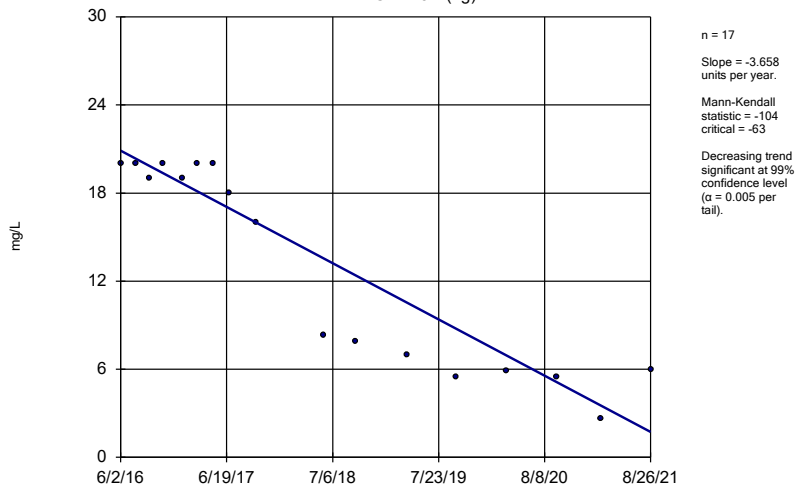
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = -3.658 units per year.

Mann-Kendall statistic = -104
critical = -63

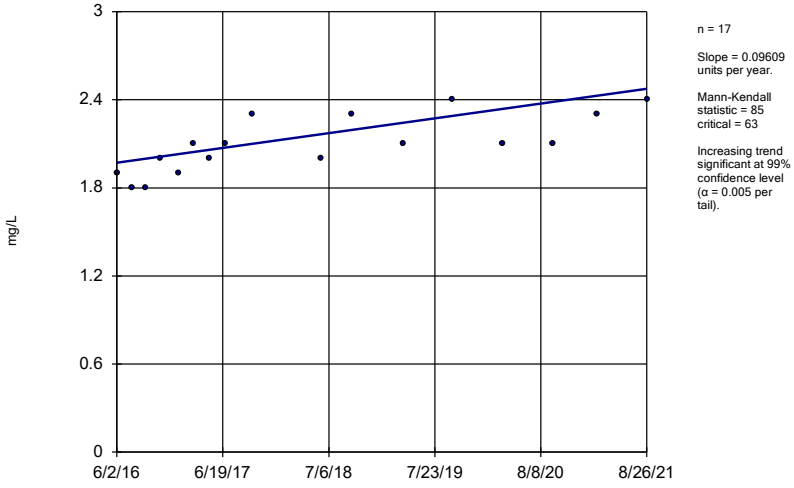
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0.09609 units per year.

Mann-Kendall statistic = 85
critical = 63

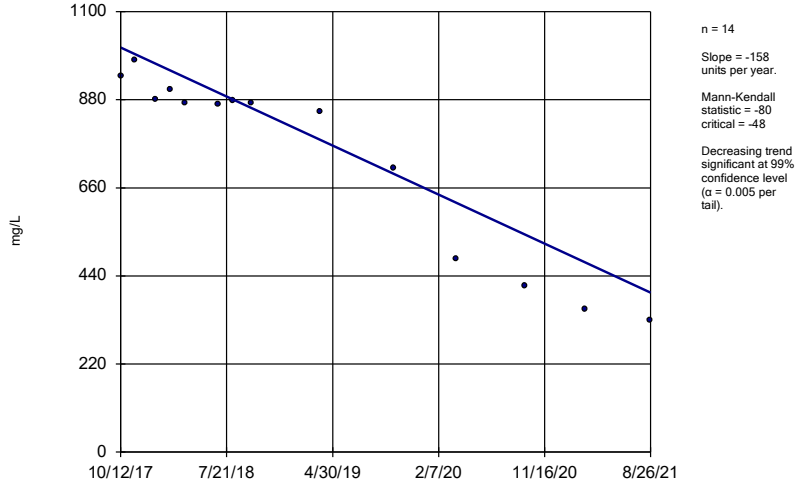
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 14

Slope = -158 units per year.

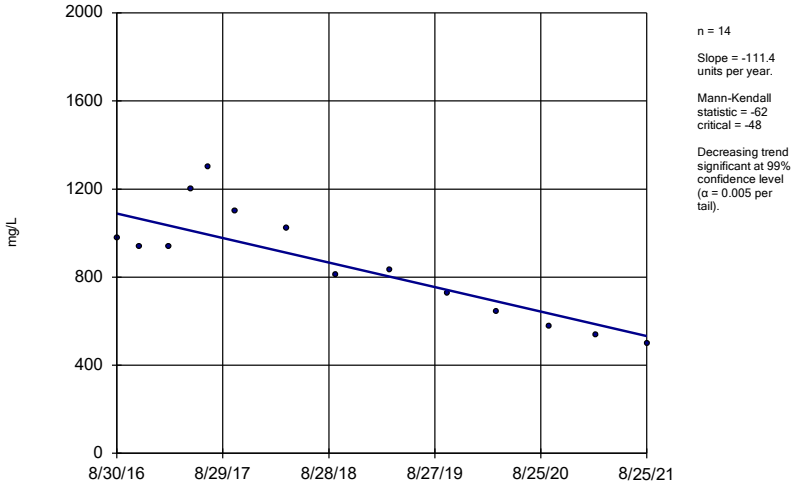
Mann-Kendall statistic = -80
critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-42



n = 14

Slope = -111.4 units per year.

Mann-Kendall statistic = -62
critical = -48

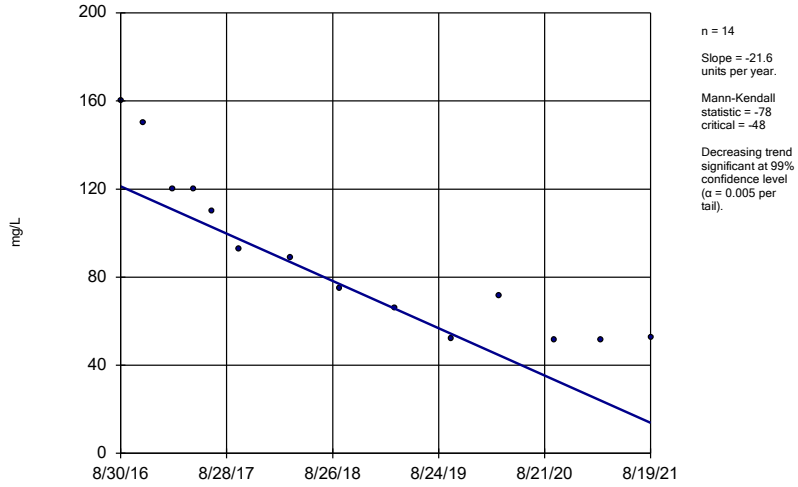
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -21.6 units per year.

Mann-Kendall statistic = -78
critical = -48

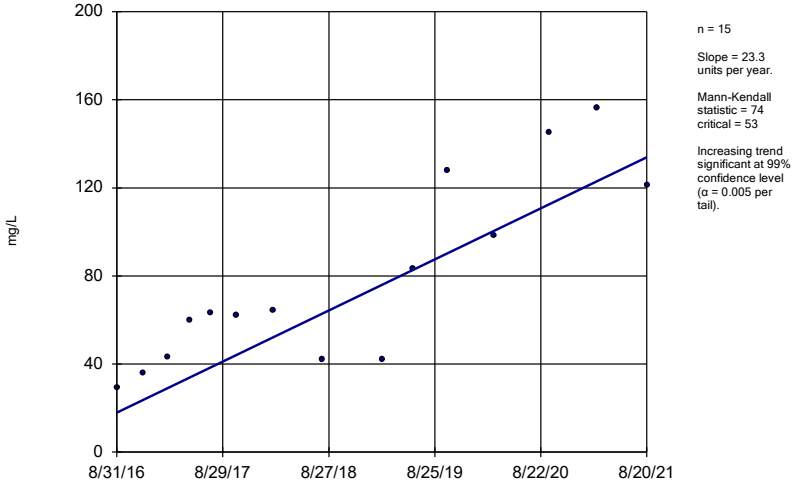
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 23.3 units per year.

Mann-Kendall statistic = 74
critical = 53

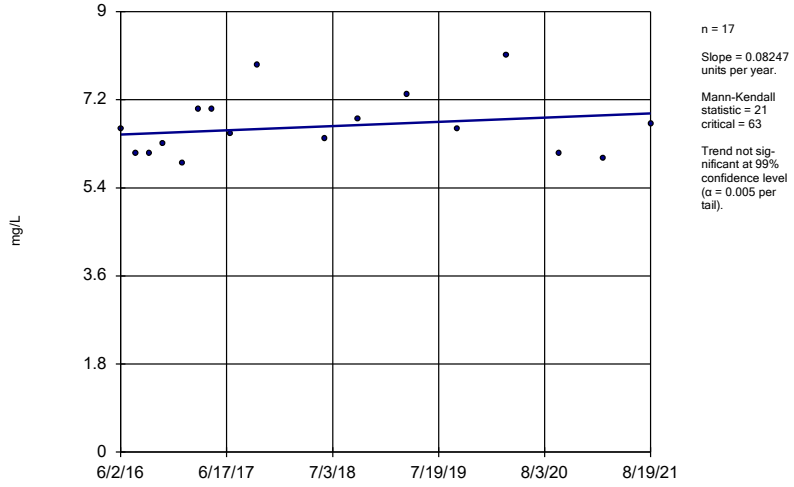
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = 0.08247 units per year.

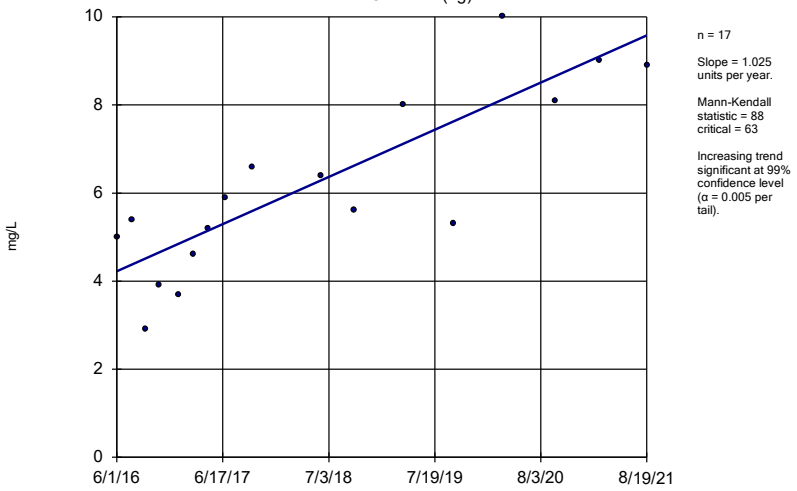
Mann-Kendall statistic = 21
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = 1.025 units per year.

Mann-Kendall statistic = 88
critical = 63

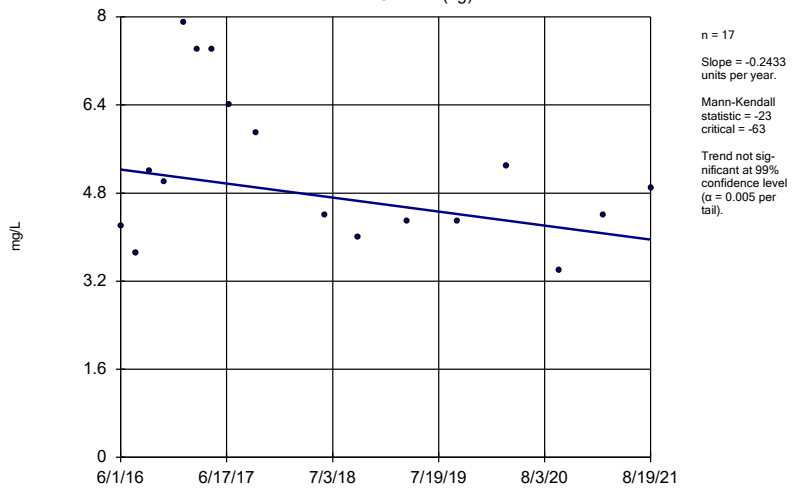
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = -0.2433 units per year.

Mann-Kendall statistic = -23
critical = -63

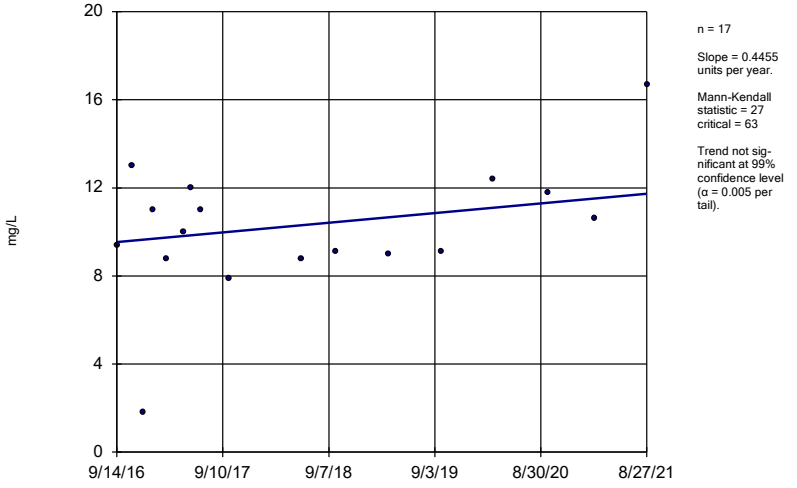
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 17

Slope = 0.4455 units per year.

Mann-Kendall statistic = 27
critical = 63

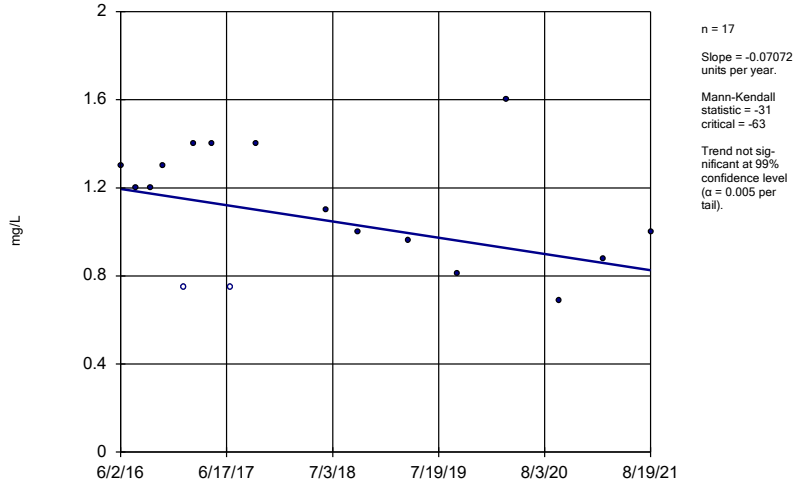
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = -0.07072 units per year.

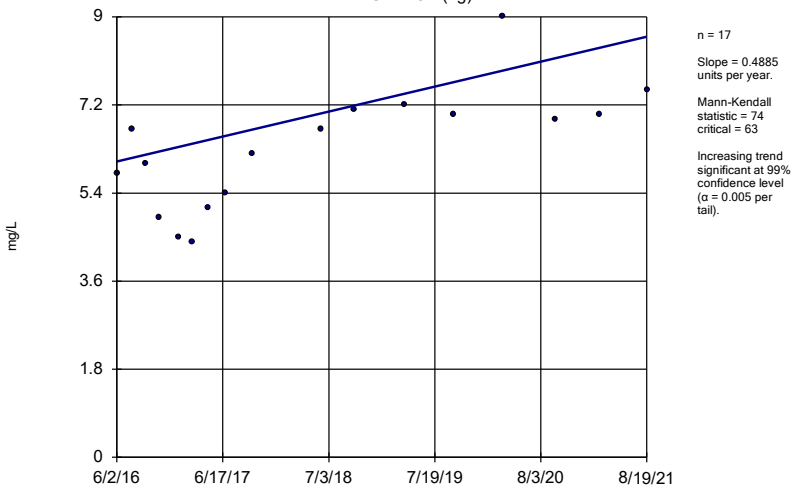
Mann-Kendall statistic = -31
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-3D (bg)



n = 17

Slope = 0.4885 units per year.

Mann-Kendall statistic = 74
critical = 63

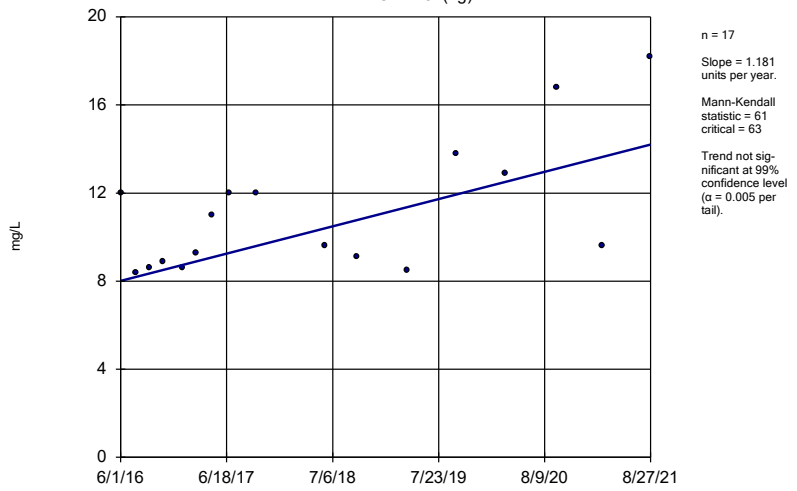
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = 1.181 units per year.

Mann-Kendall statistic = 61
critical = 63

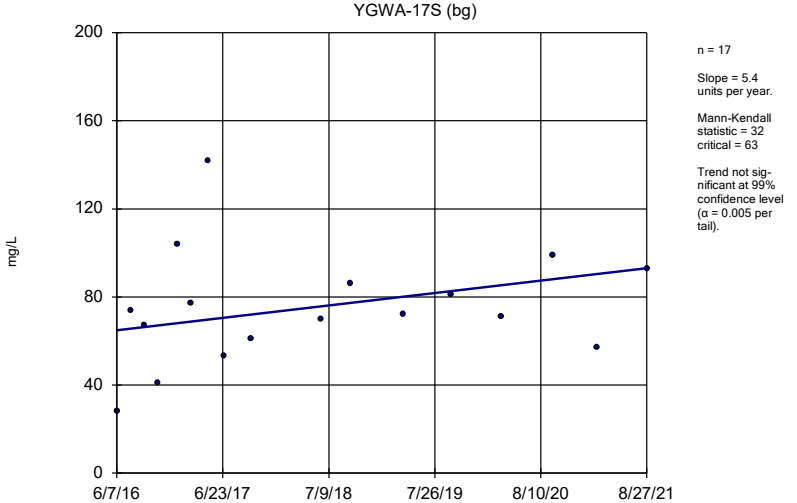
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-17S (bg)



n = 17

Slope = 5.4 units per year.

Mann-Kendall statistic = 32
critical = 63

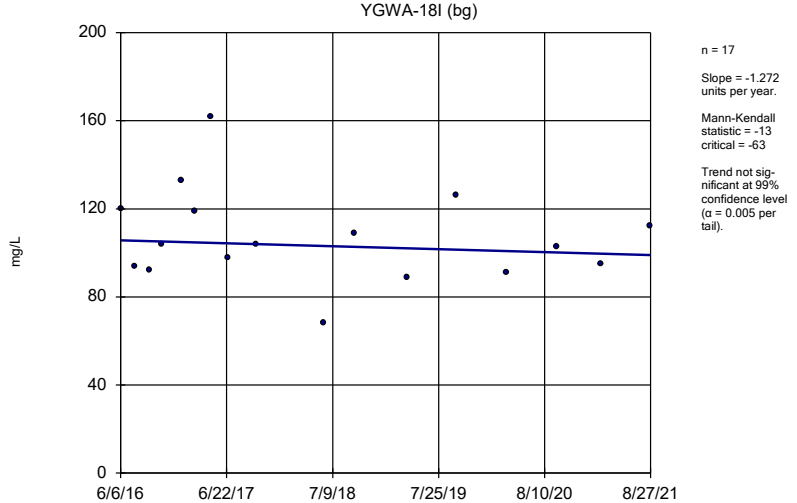
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18I (bg)



n = 17

Slope = -1.272 units per year.

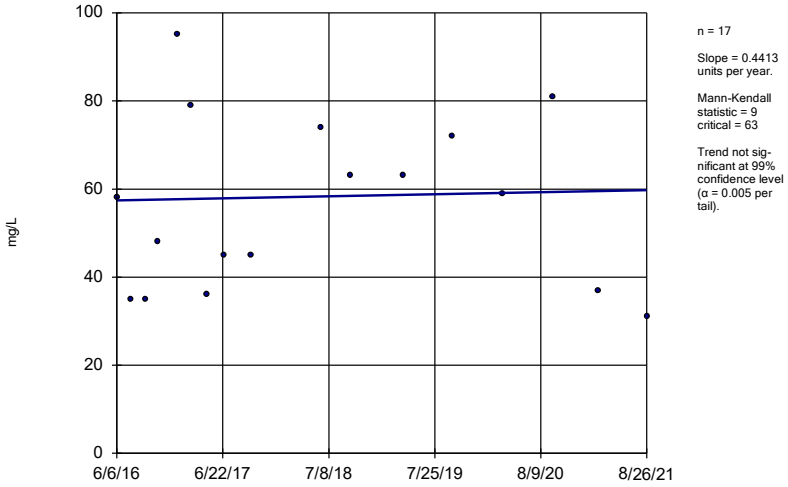
Mann-Kendall statistic = -13
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-18S (bg)



n = 17

Slope = 0.4413 units per year.

Mann-Kendall statistic = 9
critical = 63

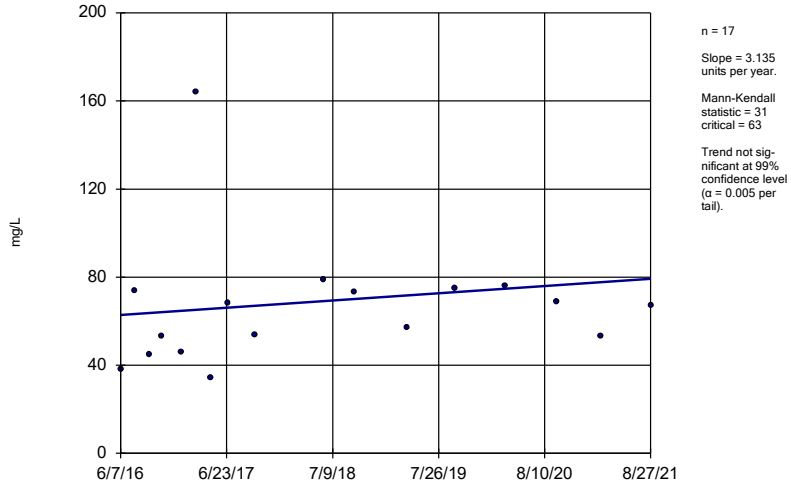
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-20S (bg)



n = 17

Slope = 3.135 units per year.

Mann-Kendall statistic = 31
critical = 63

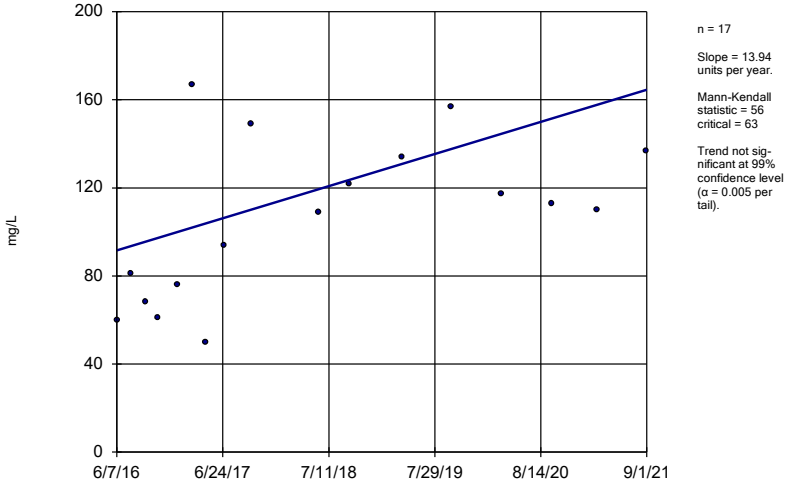
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-21I (bg)



n = 17

Slope = 13.94 units per year.

Mann-Kendall statistic = 56
critical = 63

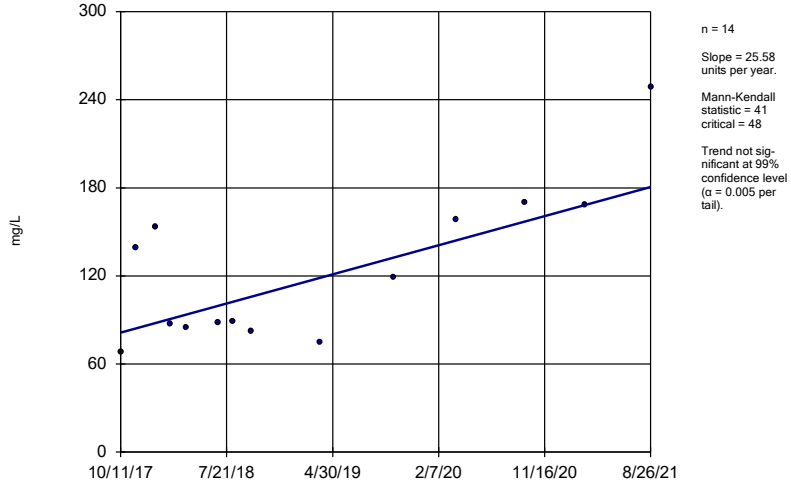
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-39 (bg)



n = 14

Slope = 25.58 units per year.

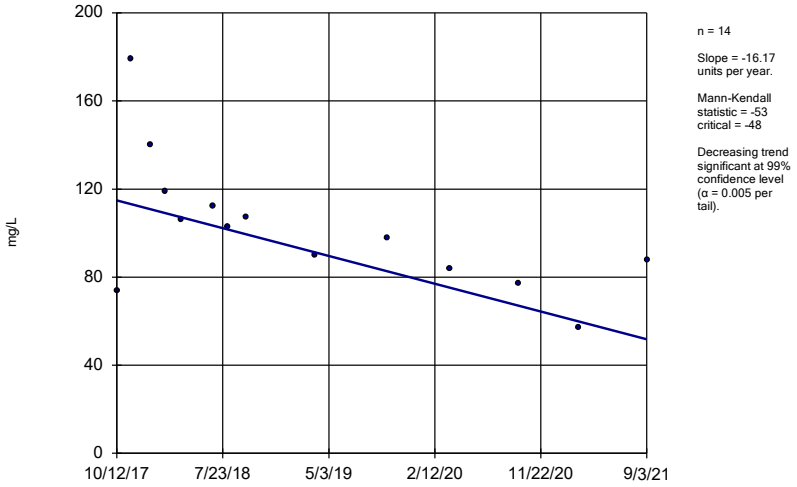
Mann-Kendall statistic = 41
critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-40 (bg)



n = 14

Slope = -16.17 units per year.

Mann-Kendall statistic = -53
critical = -48

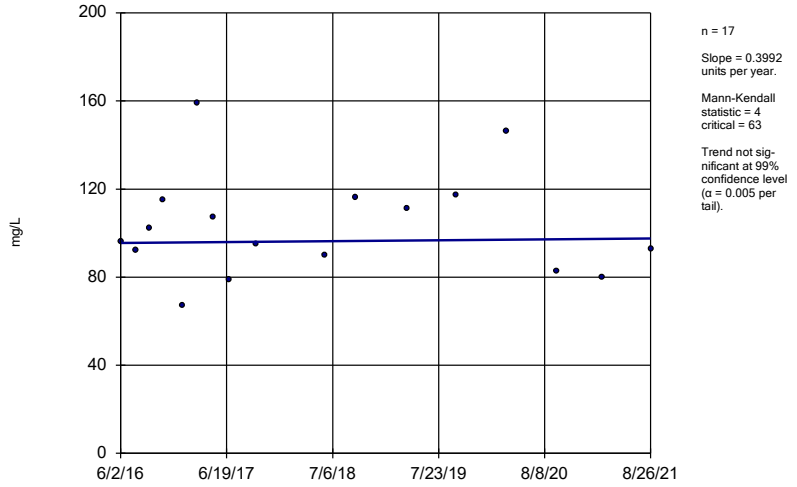
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 17

Slope = 0.3992 units per year.

Mann-Kendall statistic = 4
critical = 63

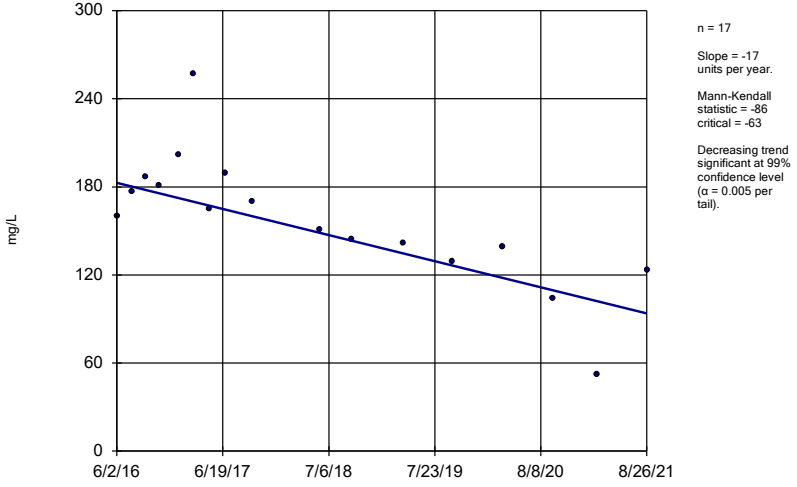
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5D (bg)



n = 17

Slope = -17 units per year.

Mann-Kendall statistic = -86
critical = -63

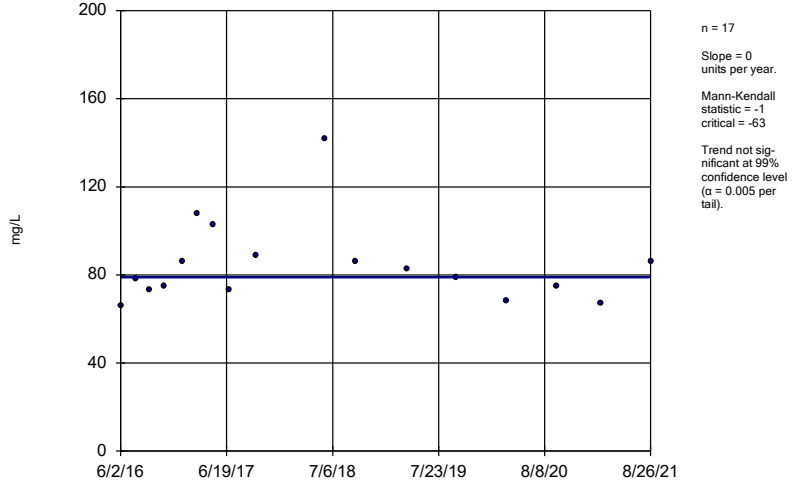
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-5I (bg)



n = 17

Slope = 0 units per year.

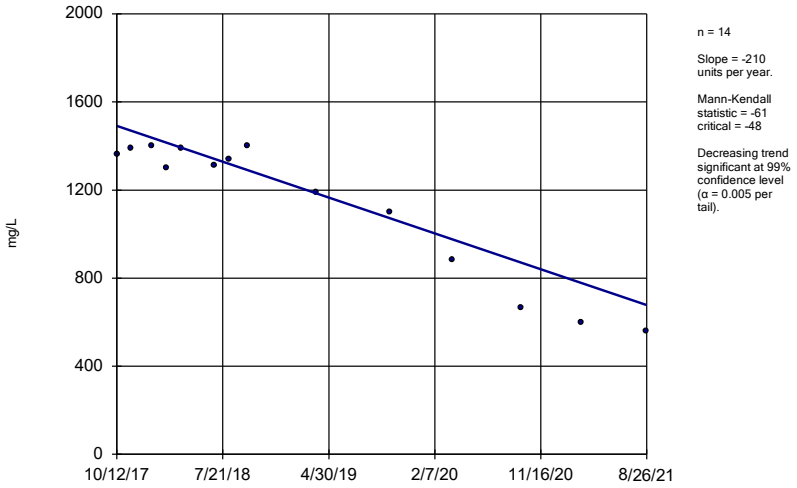
Mann-Kendall statistic = -1
critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-38



n = 14

Slope = -210 units per year.

Mann-Kendall statistic = -61 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

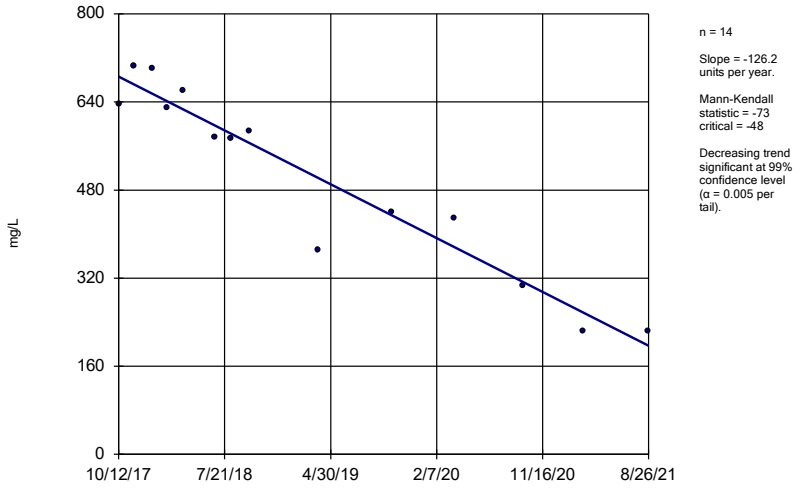
Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-41



n = 14

Slope = -126.2 units per year.

Mann-Kendall statistic = -73 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

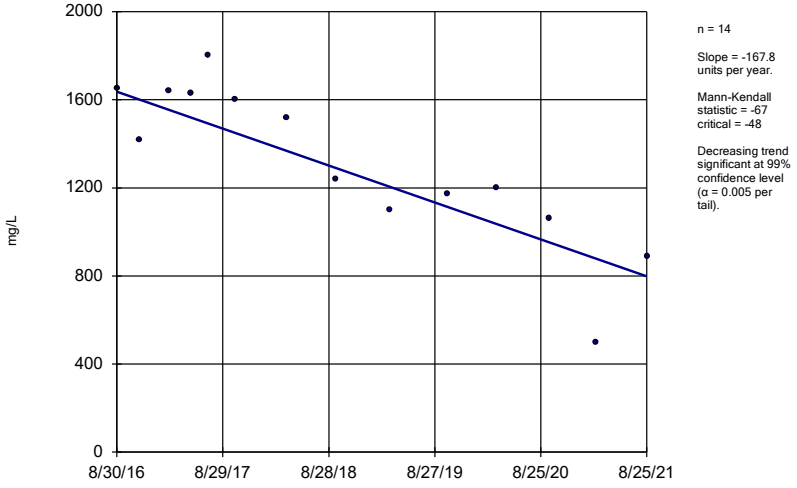
Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-42



n = 14

Slope = -167.8 units per year.

Mann-Kendall statistic = -67 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

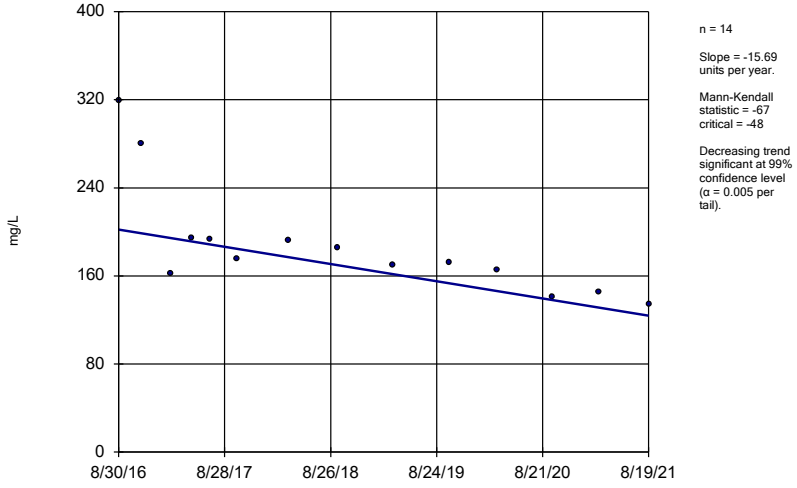
Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-47 (bg)



n = 14

Slope = -15.69 units per year.

Mann-Kendall statistic = -67 critical = -48

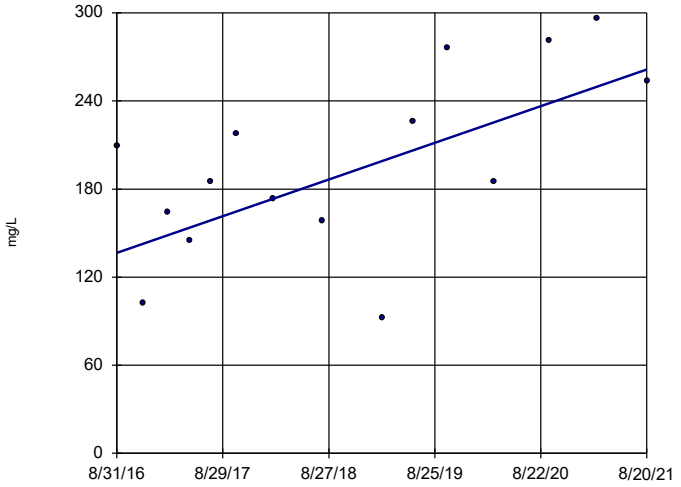
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = 25.14 units per year.

Mann-Kendall statistic = 48 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

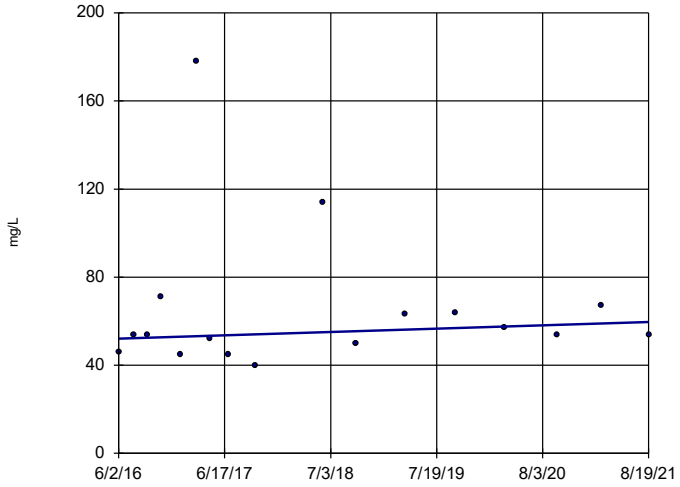
Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-14S (bg)



n = 17

Slope = 1.46 units per year.

Mann-Kendall statistic = 17 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

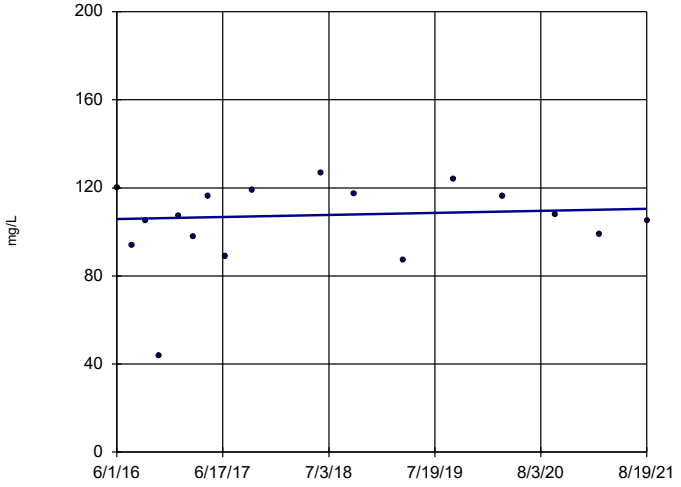
Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 17

Slope = 0.915 units per year.

Mann-Kendall statistic = 10 critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

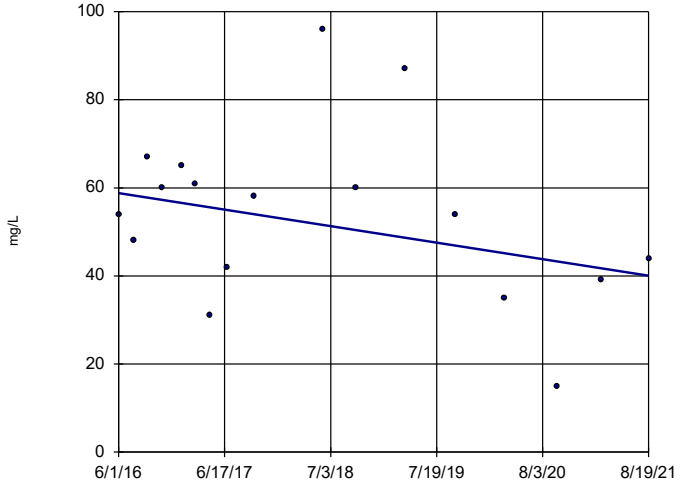
Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1I (bg)



n = 17

Slope = -3.586 units per year.

Mann-Kendall statistic = -32 critical = -63

Trend not significant at 99% confidence level (α = 0.005 per tail).

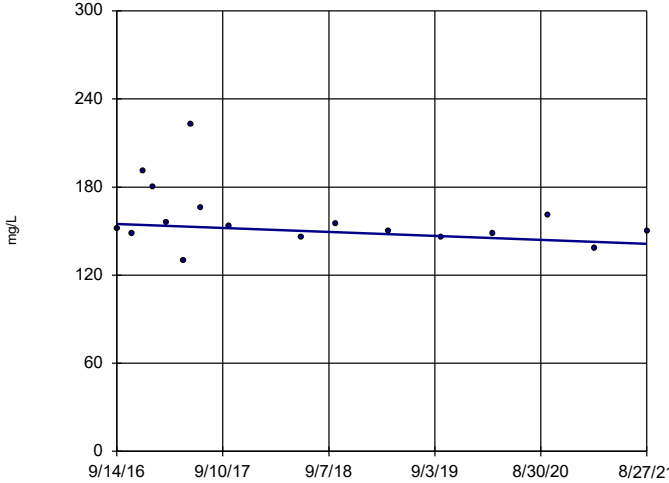
Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-2I (bg)



n = 17

Slope = -2.761 units per year.

Mann-Kendall statistic = -35
critical = -63

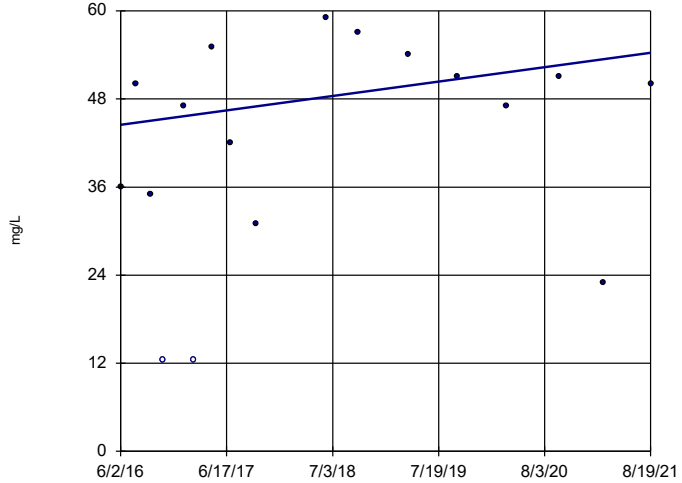
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 17

Slope = 1.885 units per year.

Mann-Kendall statistic = 20
critical = 63

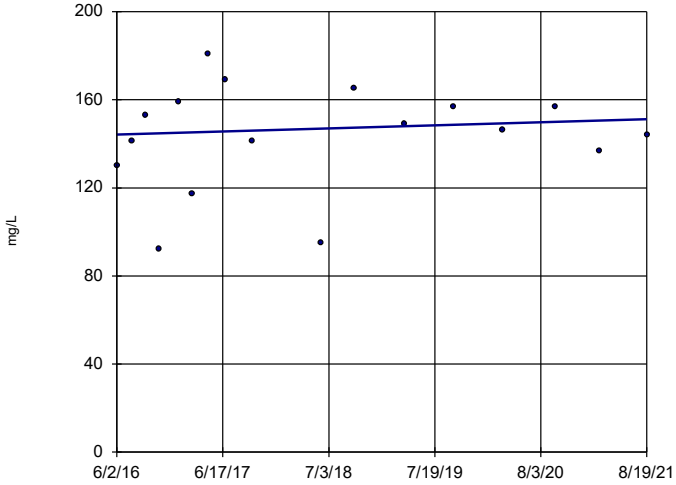
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 17

Slope = 1.346 units per year.

Mann-Kendall statistic = 10
critical = 63

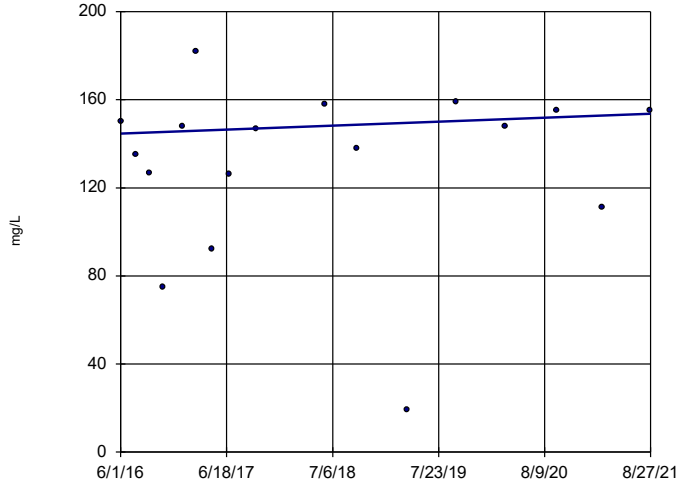
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:53 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 17

Slope = 1.702 units per year.

Mann-Kendall statistic = 14
critical = 63

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 10/29/2021 8:54 AM View: Appendix III - Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

FIGURE F.

Upper Tolerance Limits Summary Table

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/28/2021, 6:57 PM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.0047	n/a	n/a	n/a	334	n/a	n/a	86.83	n/a	n/a	NaN	NP Inter(NDs)
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	382	n/a	n/a	78.8	n/a	n/a	NaN	NP Inter(NDs)
Barium (mg/L)	n/a	0.071	n/a	n/a	n/a	382	n/a	n/a	2.88	n/a	n/a	NaN	NP Inter(normality)
Beryllium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	80.87	n/a	n/a	NaN	NP Inter(NDs)
Cadmium (mg/L)	n/a	0.0005	n/a	n/a	n/a	366	n/a	n/a	95.63	n/a	n/a	NaN	NP Inter(NDs)
Chromium (mg/L)	n/a	0.0093	n/a	n/a	n/a	334	n/a	n/a	78.74	n/a	n/a	NaN	NP Inter(NDs)
Cobalt (mg/L)	n/a	0.035	n/a	n/a	n/a	378	n/a	n/a	69.31	n/a	n/a	NaN	NP Inter(NDs)
Combined Radium 226 + 228 (pCi/L)	n/a	6.92	n/a	n/a	n/a	361	n/a	n/a	0	n/a	n/a	NaN	NP Inter(normality)
Fluoride (mg/L)	n/a	0.68	n/a	n/a	n/a	381	n/a	n/a	67.98	n/a	n/a	NaN	NP Inter(NDs)
Lead (mg/L)	n/a	0.0013	n/a	n/a	n/a	336	n/a	n/a	83.63	n/a	n/a	NaN	NP Inter(NDs)
Lithium (mg/L)	n/a	0.03	n/a	n/a	n/a	361	n/a	n/a	27.15	n/a	n/a	NaN	NP Inter(normality)
Mercury (mg/L)	n/a	0.0002	n/a	n/a	n/a	290	n/a	n/a	93.1	n/a	n/a	NaN	NP Inter(NDs)
Molybdenum (mg/L)	n/a	0.014	n/a	n/a	n/a	325	n/a	n/a	60	n/a	n/a	NaN	NP Inter(NDs)
Selenium (mg/L)	n/a	0.005	n/a	n/a	n/a	364	n/a	n/a	92.03	n/a	n/a	NaN	NP Inter(NDs)
Thallium (mg/L)	n/a	0.001	n/a	n/a	n/a	300	n/a	n/a	96.67	n/a	n/a	NaN	NP Inter(NDs)

FIGURE G.

YATES AMA-R6 GWPS					
Constituent Name	**MCL**	**CCR-Rule Specified**	**Background Limit**	**Federal GWPS**	**State GWPS**
Antimony, Total (mg/L)	0.006		0.0047	0.006	0.006
Arsenic, Total (mg/L)	0.01		0.005	0.01	0.01
Barium, Total (mg/L)	2		0.071	2	2
Beryllium, Total (mg/L)	0.004		0.0005	0.004	0.004
Cadmium, Total (mg/L)	0.005		0.0005	0.005	0.005
Chromium, Total (mg/L)	0.1		0.0093	0.1	0.1
Cobalt, Total (mg/L)		0.006	0.035	0.035	0.035
Combined Radium, Total (pCi/L)	5		6.92	6.92	6.92
Fluoride, Total (mg/L)	4		0.68	4	4
Lead, Total (mg/L)		0.015	0.0013	0.015	0.0013
Lithium, Total (mg/L)		0.04	0.03	0.04	0.03
Mercury, Total (mg/L)	0.002		0.0002	0.002	0.002
Molybdenum, Total (mg/L)		0.1	0.014	0.1	0.014
Selenium, Total (mg/L)	0.05		0.005	0.05	0.05
Thallium, Total (mg/L)	0.002		0.001	0.002	0.002

**Grey cell indicates Background Limit is higher than MCL or CCR Rule Specified Level*

**MCL = Maximum Contaminant Level*

**CCR = Coal Combustion Residual*

**GWPS = Groundwater Protection Standard*

FIGURE H.

Federal Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.01261	0.0002101	0.006	No	6	0.006128	0.009301	50	Kaplan-Meier	ln(x)	0.01	Param.
Antimony (mg/L)	YAMW-4	0.001325	0.0003728	0.006	No	4	0.001343	0.001127	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	YAMW-5	0.003	0.00033	0.006	No	4	0.002333	0.001335	75	Kaplan-Meier	No	0.0625	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	17	0.002568	0.0009666	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	14	0.002361	0.001078	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	14	0.002886	0.0004276	92.86	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	14	0.002824	0.0006601	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	14	0.002808	0.0007189	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	14	0.002688	0.0008013	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	6	0.002565	0.001066	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	12	0.002646	0.0008569	83.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	17	0.002876	0.0005093	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	17	0.0041	0.006318	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	YAMW-4	0.005	0.00079	0.01	No	4	0.002947	0.002372	50	None	No	0.0625	NP (normality)
Arsenic (mg/L)	YAMW-5	0.001914	0.0006656	0.01	No	4	0.003112	0.002191	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	19	0.0048	0.0008718	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00204	0.0007945	0.01	No	15	0.001651	0.001446	13.33	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	15	0.003021	0.002197	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-42	0.003008	0.001423	0.01	No	15	0.002291	0.001282	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	15	0.004147	0.001769	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.001	0.01	No	14	0.004104	0.001782	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	7	0.003807	0.002039	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	12	0.002412	0.001928	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	19	0.004816	0.000803	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	19	0.004092	0.001808	78.95	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06247	0.02668	2	No	7	0.04457	0.01506	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-2	0.01016	0.00639	2	No	4	0.008275	0.0008302	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-4	0.03323	-0.007731	2	No	4	0.01275	0.009021	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-5	0.06468	0.02232	2	No	4	0.0435	0.009327	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04532	0.03006	2	No	19	0.03769	0.01303	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02349	0.01804	2	No	15	0.02077	0.00402	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.0296	0.02029	2	No	15	0.02495	0.006866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04568	0.03134	2	No	15	0.03851	0.01058	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.0344	0.01678	2	No	15	0.02559	0.013	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07922	0.06936	2	No	14	0.07429	0.006962	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.067	0.032	2	No	7	0.04386	0.01475	0	None	No	0.008	NP (normality)
Barium (mg/L)	PZ-37	0.05638	0.0398	2	No	12	0.04809	0.01057	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	19	0.02076	0.00347	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04374	0.0322	2	No	19	0.03797	0.009852	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	7	0.0003604	0.0002	57.14	None	No	0.008	NP (NDs)
Beryllium (mg/L)	YAMW-2	0.0005	0.000051	0.004	No	4	0.000279	0.0002553	50	None	No	0.0625	NP (normality)
Beryllium (mg/L)	YAMW-5	0.0001844	0.00007802	0.004	No	5	0.0001312	0.00003174	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	19	0.0002098	0.0001808	26.32	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.0015	0.004	No	15	0.00288	0.0009518	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.00009	0.004	No	15	0.0003603	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.00029	0.004	No	15	0.00041	0.000147	40	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	14	0.0001393	0.0001047	7.143	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004523	0.0002517	0.004	No	8	0.000395	0.0001122	25	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003866	0.0002088	0.004	No	12	0.0003567	0.0001256	16.67	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	19	0.0001789	0.0001451	15.79	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.000322	0.0001979	0.004	No	19	0.0002599	0.000106	5.263	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	7	0.00031	0.0001806	42.86	None	No	0.008	NP (normality)
Cadmium (mg/L)	YAMW-5	0.0002803	0.0001297	0.005	No	4	0.000205	0.00003317	0	None	No	0.01	Param.

Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	19	0.0004774	0.00009865	94.74	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.0029	0.0014	0.005	No	15	0.002267	0.0006747	0	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	15	0.0003027	0.0001496	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.0002	0.005	No	15	0.0003847	0.0001638	46.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	14	0.0004693	0.0001149	92.86	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	7	0.0004514	0.0001285	85.71	None	No	0.008	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006865	0.0002751	0.005	No	12	0.0005117	0.0002597	16.67	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	19	0.0002568	0.000153	26.32	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.005	0.00058	0.1	No	5	0.001616	0.001898	20	None	No	0.031	NP (normality)
Chromium (mg/L)	YAMW-2	0.003819	-0.0008143	0.1	No	4	0.001503	0.00102	0	None	No	0.01	Param.
Chromium (mg/L)	YAMW-4	0.005	0.00057	0.1	No	4	0.003892	0.002215	75	None	No	0.0625	NP (NDs)
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	15	0.003409	0.002034	60	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	15	0.00441	0.001557	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	15	0.004693	0.00119	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	15	0.004155	0.001757	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	15	0.003838	0.001995	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	13	0.001962	0.0009421	7.692	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.005	0.0006	0.1	No	5	0.001622	0.001904	20	None	No	0.031	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	12	0.004133	0.001581	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	15	0.004209	0.001637	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	15	0.004099	0.001656	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02746	0.006788	0.035	No	8	0.01712	0.01043	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YAMW-2	0.0025	0.00082	0.035	No	4	0.001313	0.0007951	0	None	No	0.0625	NP (normality)
Cobalt (mg/L)	YAMW-4	0.001222	0.00005821	0.035	No	4	0.00064	0.0002563	0	None	No	0.01	Param.
Cobalt (mg/L)	YAMW-5	0.005	0.00077	0.035	No	4	0.003942	0.002115	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	15	0.003826	0.002023	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	15	0.002147	0.0008847	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	15	0.003367	0.001688	46.67	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	14	0.00375	0.002052	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	7	0.005129	0.0003402	85.71	None	No	0.008	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01233	0.0046	0.035	No	12	0.008467	0.004928	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	19	0.003826	0.00202	73.68	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.818	0.307	6.92	No	6	0.5625	0.186	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-2	1.123	-0.1743	6.92	No	4	0.4743	0.2857	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-4	1.882	-0.368	6.92	No	4	0.757	0.4955	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-5	1.811	0.1501	6.92	No	4	0.9805	0.3658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.7995	0.3742	6.92	No	19	0.5869	0.3632	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.275	0.578	6.92	No	15	0.9263	0.514	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.309	0.593	6.92	No	15	0.9873	0.5741	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.827	1.242	6.92	No	15	2.034	1.17	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.631	1.305	6.92	No	15	2.619	1.878	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.137	0.4963	6.92	No	14	0.8166	0.4522	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	0.968	0.1216	6.92	No	6	0.5448	0.3081	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	1.982	1.431	6.92	No	12	1.721	0.4054	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7697	0.4768	6.92	No	19	0.6233	0.25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.07	0.5501	6.92	No	19	0.8101	0.4439	0	None	No	0.01	Param.
Fluoride (mg/L)	YAMW-4	0.14	0.1	4	No	4	0.12	0.02309	50	None	No	0.0625	NP (normality)
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	20	0.09495	0.01972	85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	16	0.1578	0.1148	62.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	16	0.1006	0.0025	87.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	16	0.08694	0.02537	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1096	0.05787	4	No	16	0.1065	0.05242	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.09	4	No	15	0.09933	0.02604	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	12	0.1708	0.1163	66.67	None	No	0.01	NP (NDs)

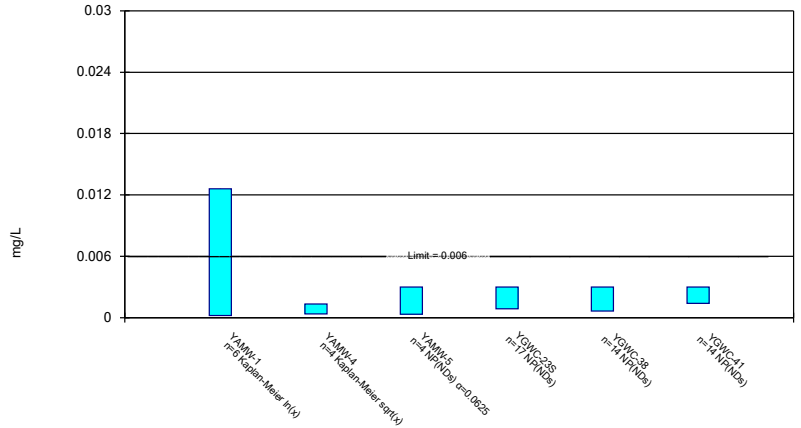
Federal Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 10:04 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	20	0.09655	0.01496	90	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	20	0.0928	0.03214	65	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.015	No	6	0.000865	0.0003307	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	YAMW-2	0.001	0.00008	0.015	No	4	0.0005475	0.0005226	50	None	No	0.0625	NP (normality)
Lead (mg/L)	YAMW-4	0.0007189	-0.0001082	0.015	No	4	0.000479	0.0003922	25	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	YAMW-5	0.0001563	0.00002421	0.015	No	4	0.000306	0.0004635	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	YGWC-23S	0.001	0.00044	0.015	No	17	0.0008133	0.0003546	76.47	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.015	No	15	0.00082	0.0003726	80	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.015	No	15	0.0007705	0.0004114	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.015	No	15	0.0007594	0.0004143	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.015	No	15	0.000877	0.0003246	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.015	No	14	0.0009328	0.0002515	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.015	No	6	0.0007062	0.0004556	66.67	None	No	0.0155	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.015	No	12	0.0006394	0.0004471	58.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.015	No	17	0.0009066	0.0002691	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0005018	0.0001591	0.015	No	17	0.0005253	0.0004283	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.02174	0.003485	0.04	No	7	0.01261	0.007686	14.29	None	No	0.01	Param.
Lithium (mg/L)	YAMW-4	0.04197	0.008528	0.04	No	4	0.02525	0.007365	0	None	No	0.01	Param.
Lithium (mg/L)	YAMW-5	0.01821	0.01179	0.04	No	4	0.015	0.001414	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.04	No	19	0.002974	0.002972	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008892	0.007522	0.04	No	15	0.008207	0.001011	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0021	0.04	No	15	0.004167	0.003124	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-42	0.04841	0.03111	0.04	No	15	0.03976	0.01276	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-43	0.01858	0.01135	0.04	No	15	0.01497	0.005331	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.04	No	14	0.0037	0.0002386	0	None	No	0.01	NP (normality)
Lithium (mg/L)	PZ-35	0.015	0.001	0.04	No	7	0.004671	0.005813	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	PZ-37	0.03008	0.02287	0.04	No	12	0.02647	0.004592	8.333	None	No	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006697	0.003217	0.04	No	19	0.005235	0.003095	5.263	None	sqrt(x)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	14	0.0001891	0.00002942	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	12	0.0001764	0.00005584	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.000048	0.002	No	12	0.0001873	0.00004388	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.00009	0.002	No	12	0.0001785	0.00005086	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	11	0.0001819	0.00004396	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004477	0.001073	0.1	No	5	0.00422	0.003387	20	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YAMW-4	0.009642	0.003658	0.1	No	4	0.00665	0.001318	0	None	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00091	0.1	No	15	0.004952	0.004314	40	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.1	No	15	0.005713	0.004331	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.1	No	13	0.009285	0.002579	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.1	No	5	0.00838	0.003622	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.1	No	12	0.004508	0.00407	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.1	No	15	0.007267	0.003689	60	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	7	0.004229	0.001338	71.43	None	No	0.008	NP (NDs)
Selenium (mg/L)	YAMW-4	0.02107	-0.004906	0.05	No	5	0.00936	0.007619	40	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	YAMW-5	0.07376	0.02504	0.05	No	5	0.0494	0.01454	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.0392	0.02709	0.05	No	19	0.03314	0.01034	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06415	0.04156	0.05	No	15	0.05285	0.01667	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05636	0.04059	0.05	No	15	0.04847	0.01164	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.008799	0.006701	0.05	No	14	0.00775	0.001481	7.143	None	No	0.01	Param.
Selenium (mg/L)	PZ-35	0.005	0.0016	0.05	No	7	0.004514	0.001285	85.71	None	No	0.008	NP (NDs)
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.005	0.0019	0.05	No	19	0.003358	0.001411	36.84	None	No	0.01	NP (normality)

Parametric and Non-Parametric (NP) Confidence Interval

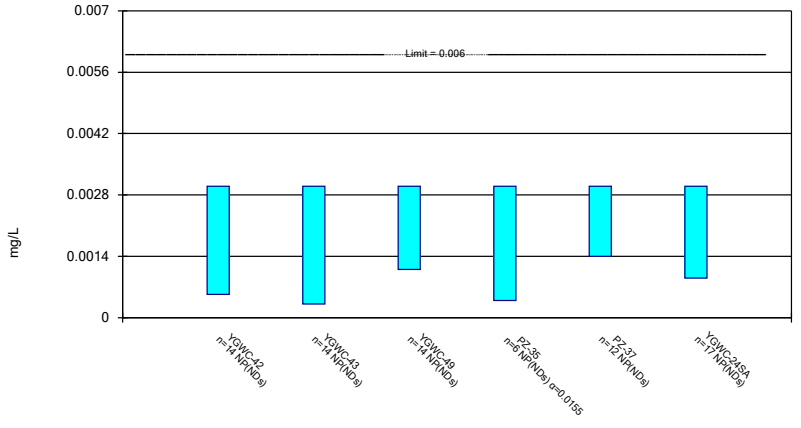
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Antimony Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

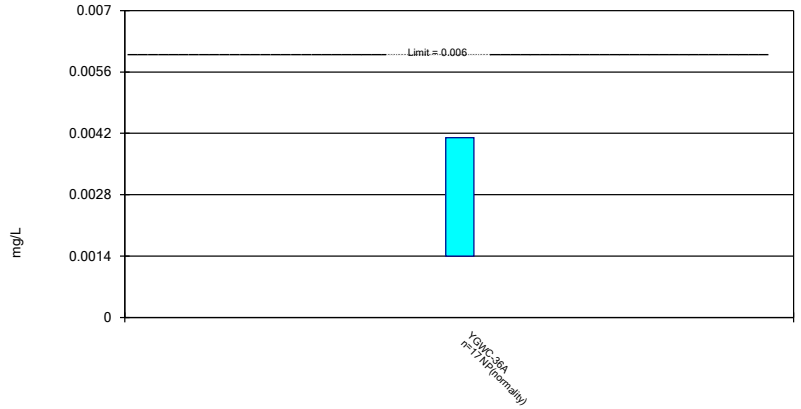
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

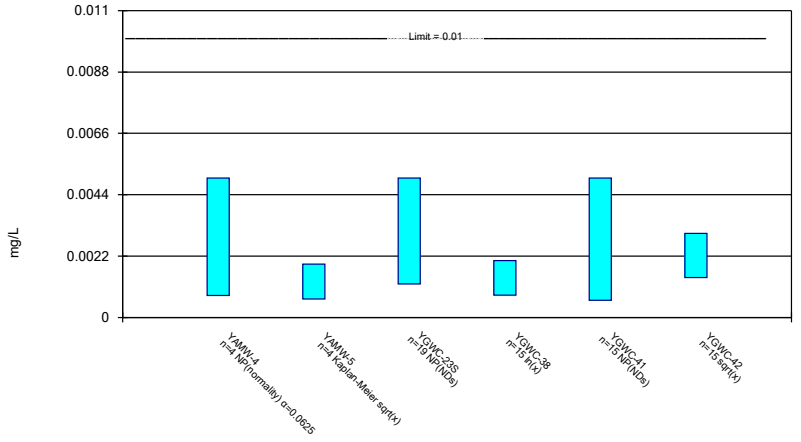
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Antimony Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

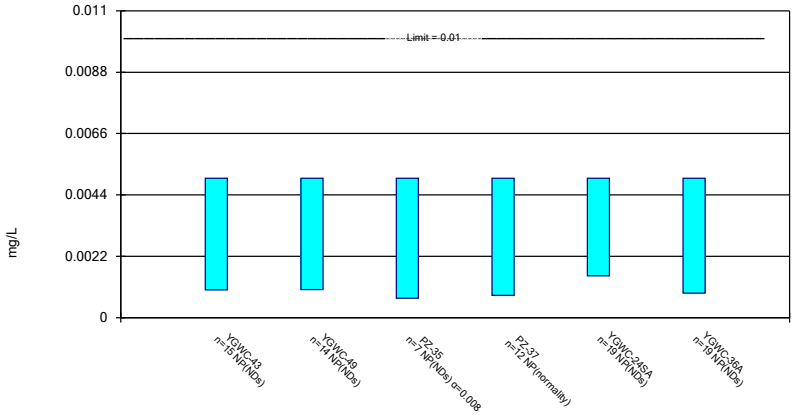
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

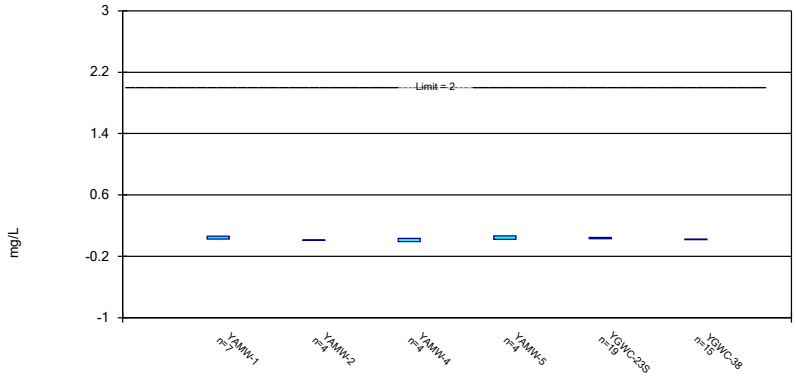


Constituent: Arsenic Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

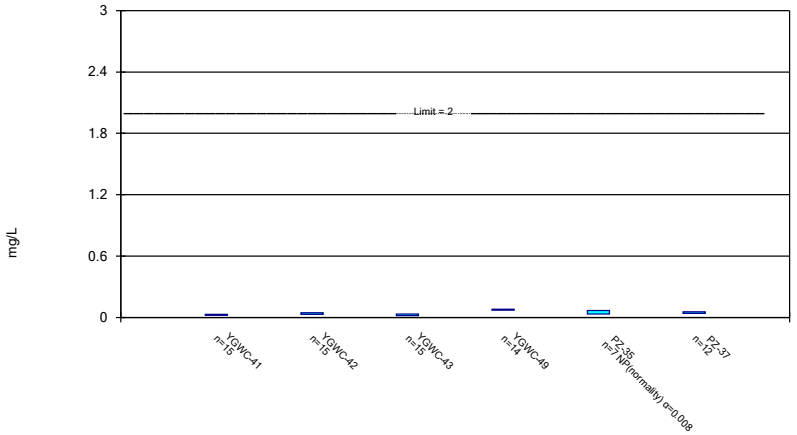


Constituent: Barium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

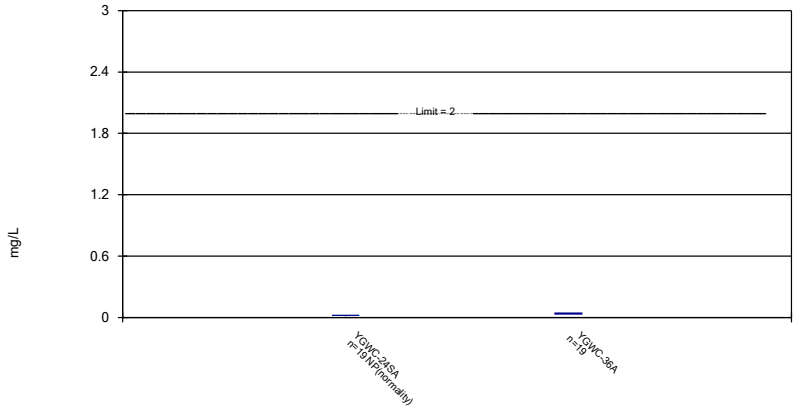


Constituent: Barium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

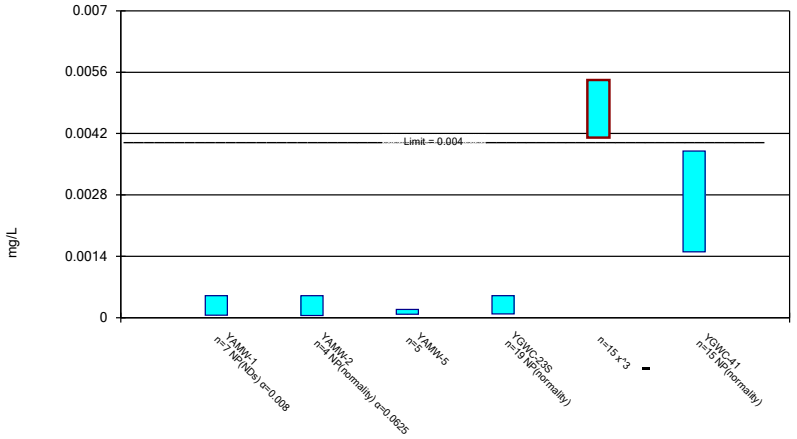
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

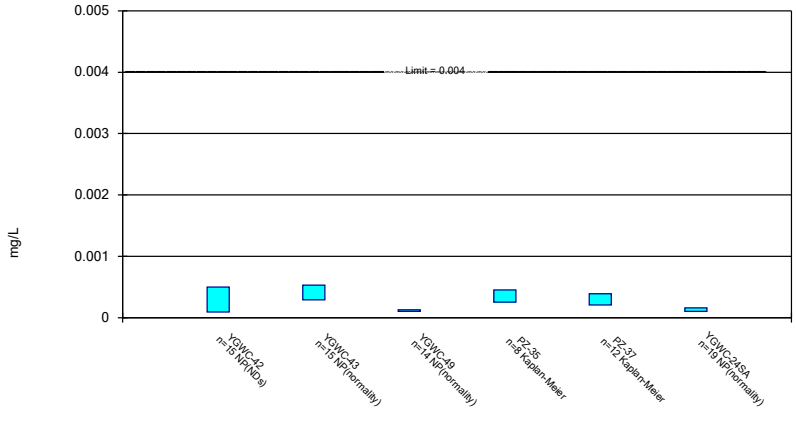


Constituent: Beryllium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric Confidence Interval

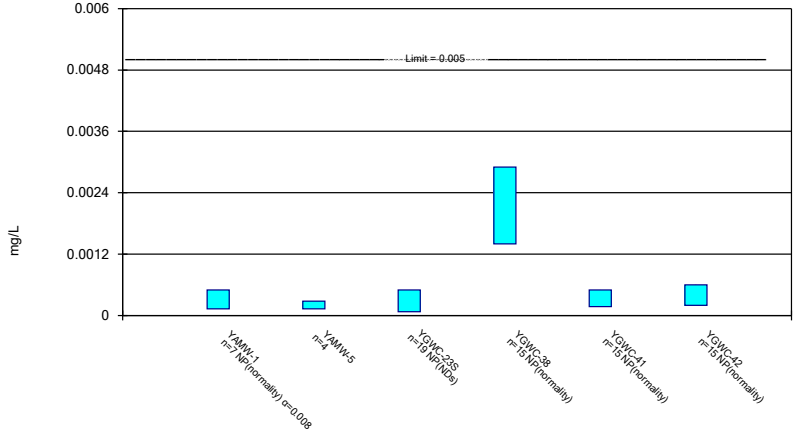
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

Constituent: Beryllium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

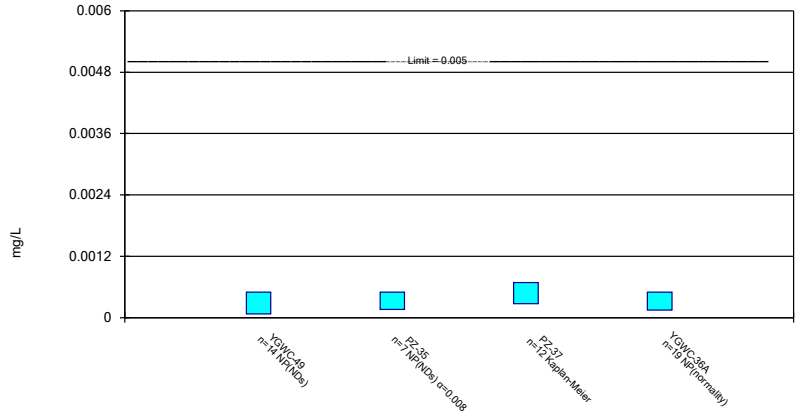
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

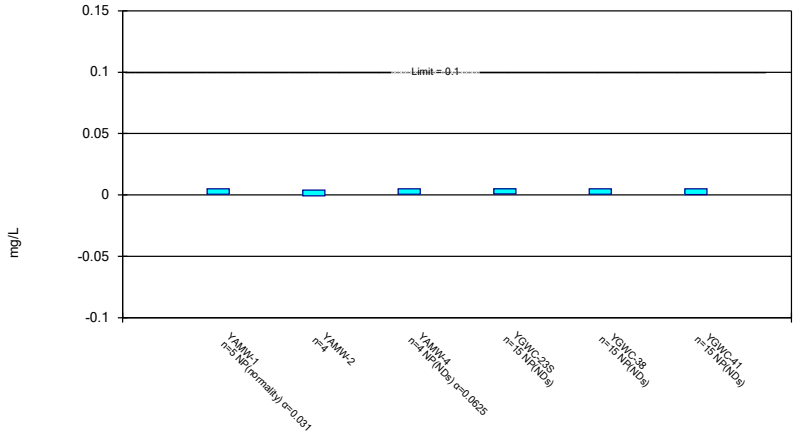
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

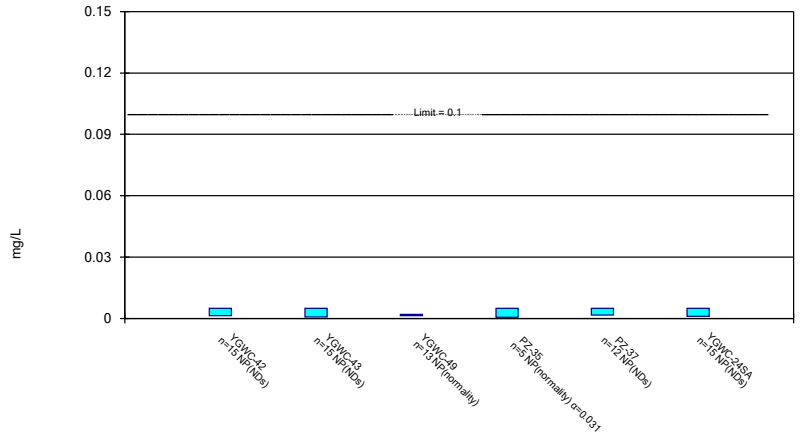
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

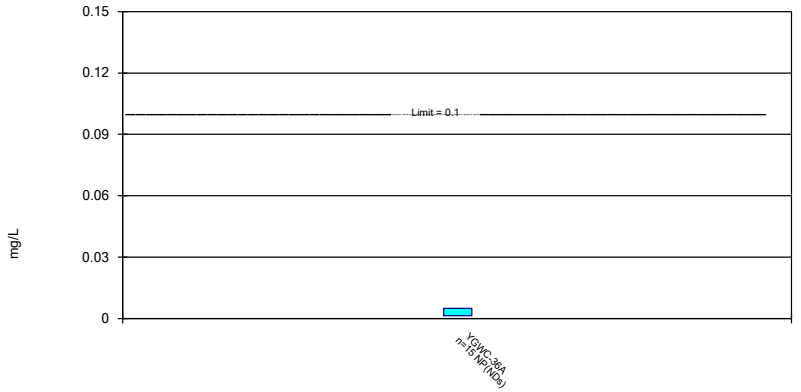
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

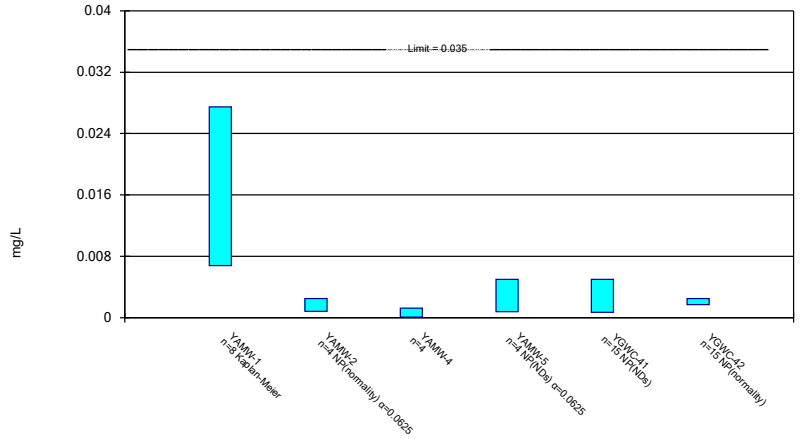
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

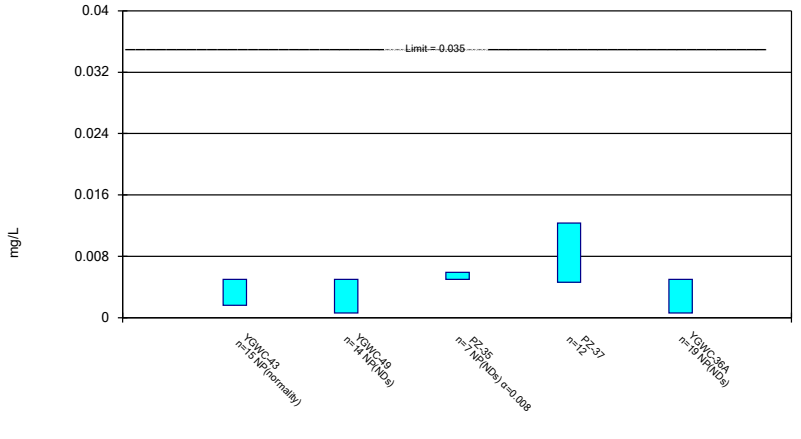


Constituent: Cobalt Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

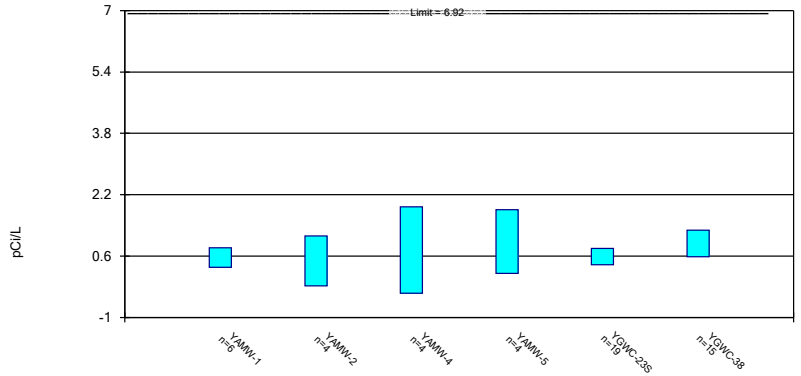


Constituent: Cobalt Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

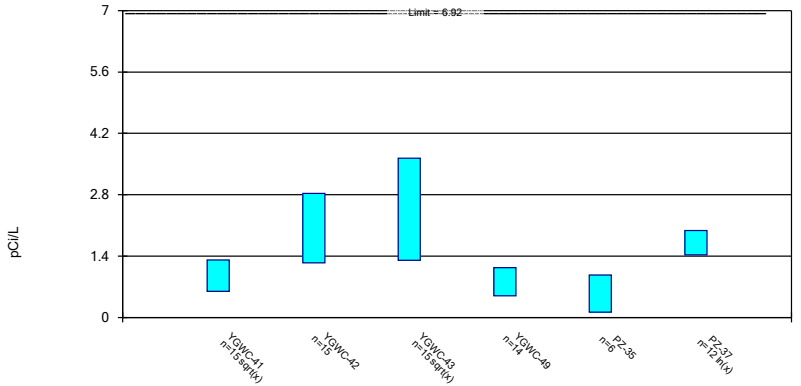


Constituent: Combined Radium 226 + 228 Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric Confidence Interval

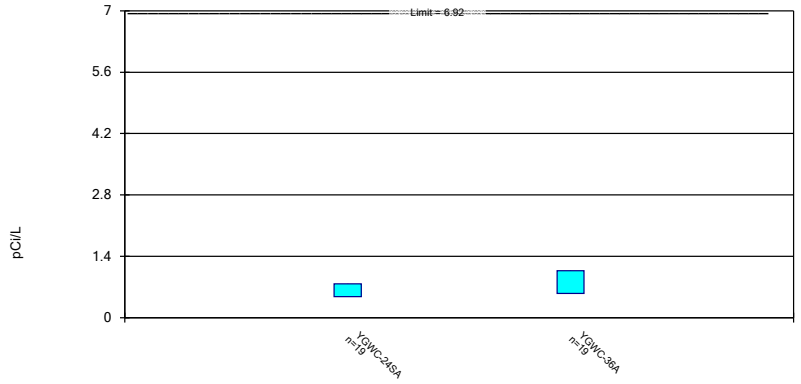
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric Confidence Interval

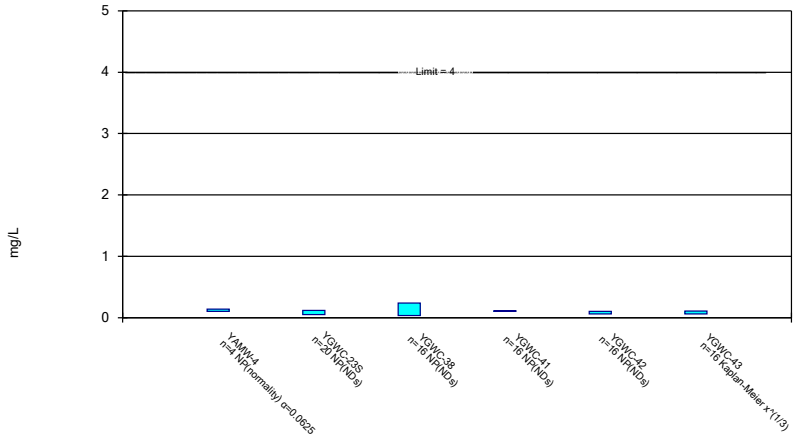
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

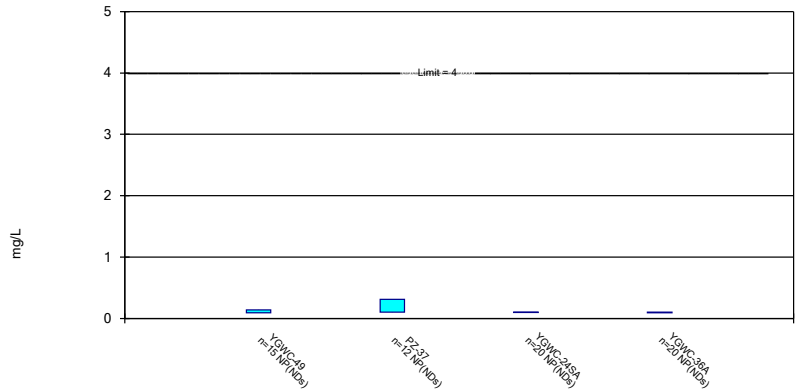
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

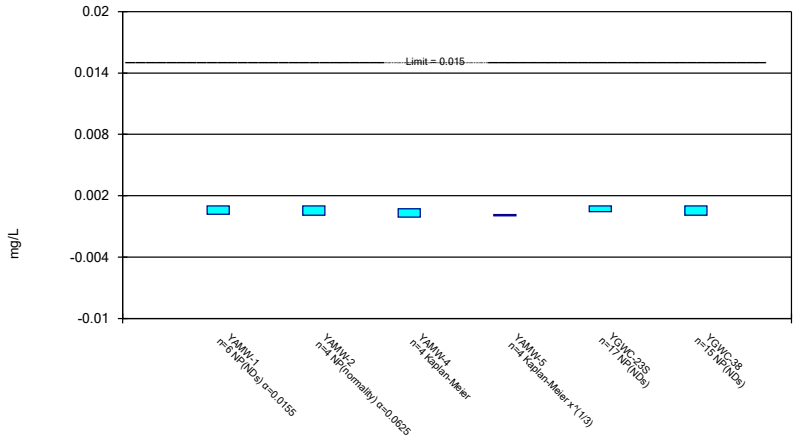
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

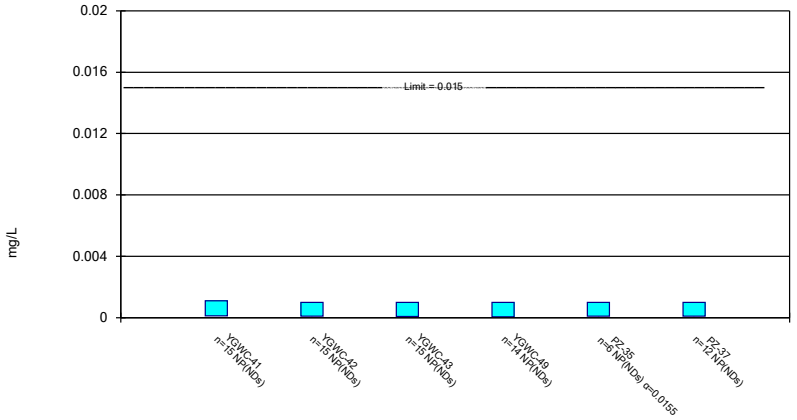
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

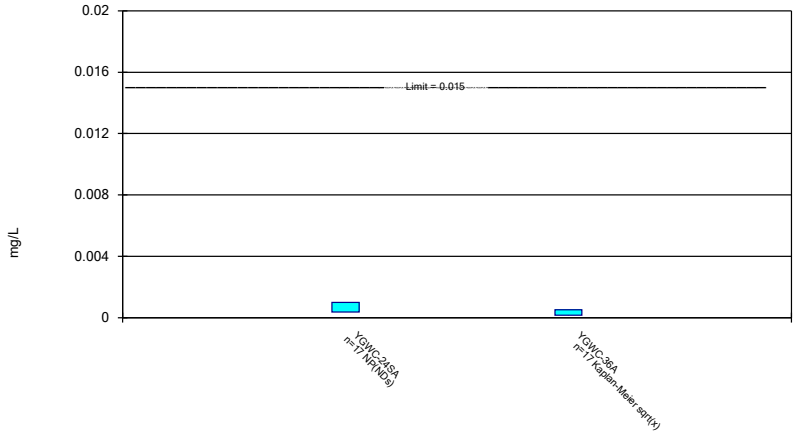


Constituent: Lead Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

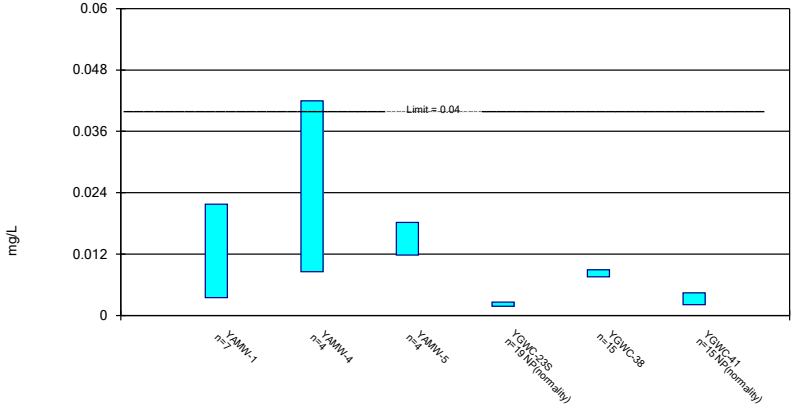


Constituent: Lead Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

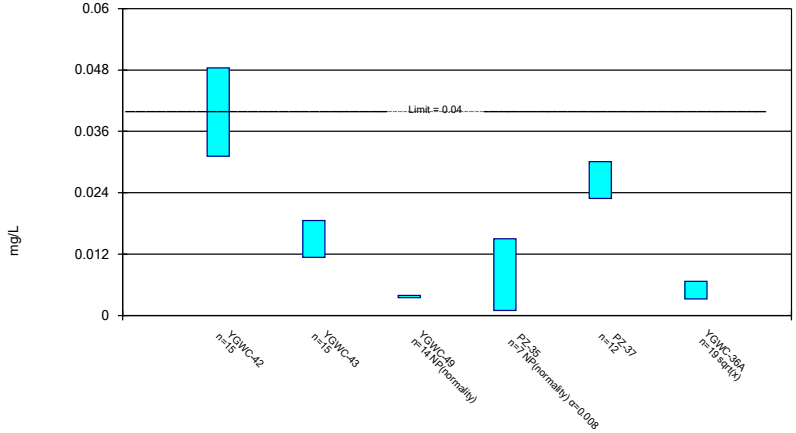


Constituent: Lithium Analysis Run 11/19/2021 10:03 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

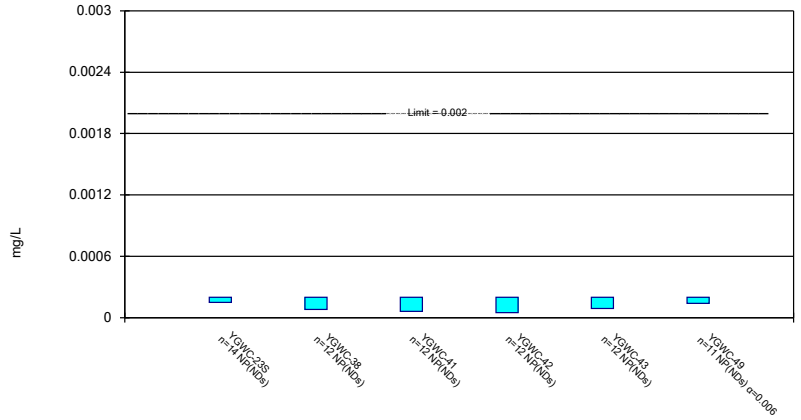
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/19/2021 10:04 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

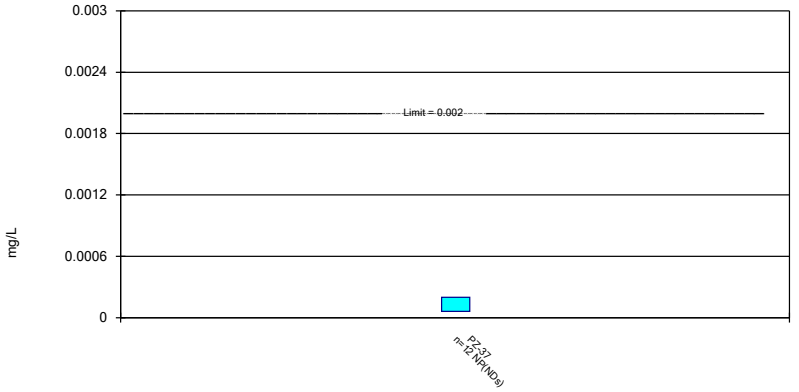


Constituent: Mercury Analysis Run 11/19/2021 10:04 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

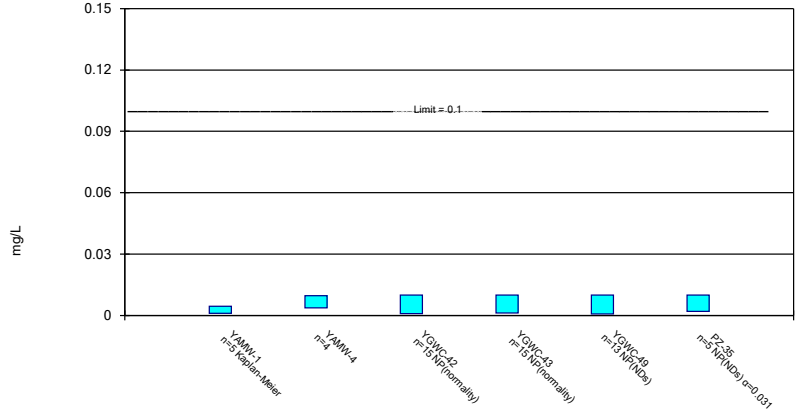


Constituent: Mercury Analysis Run 11/19/2021 10:04 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

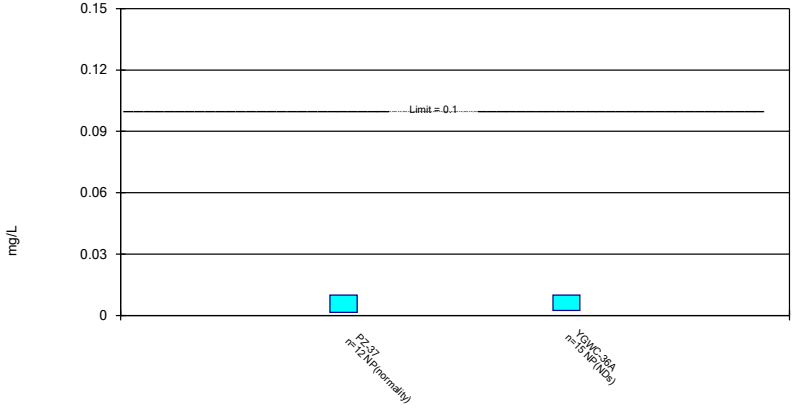


Constituent: Molybdenum Analysis Run 11/19/2021 10:04 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

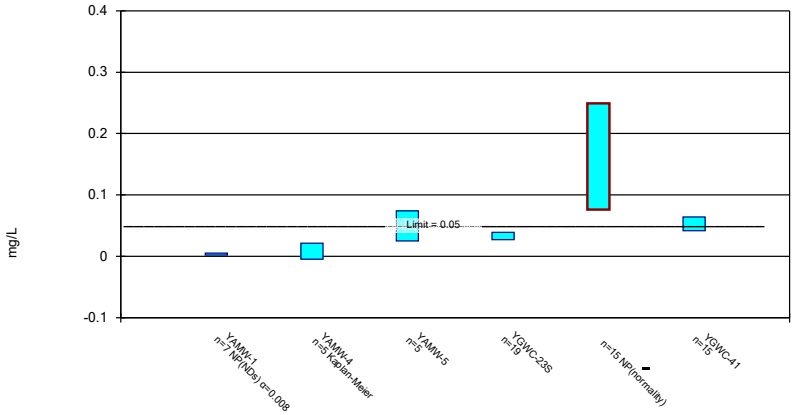
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 11/19/2021 10:04 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

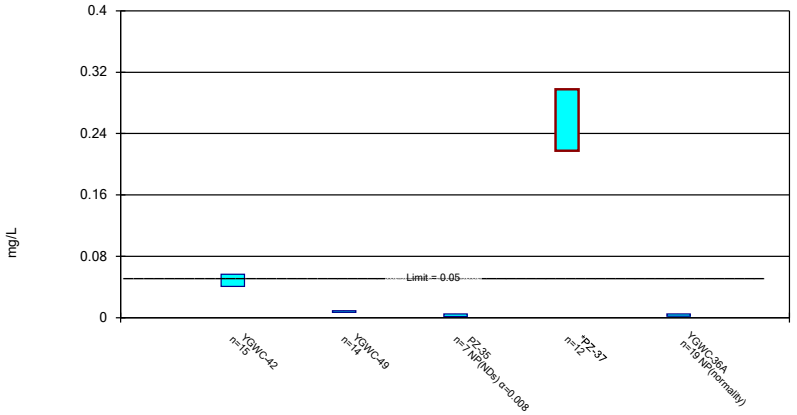


Constituent: Selenium Analysis Run 11/19/2021 10:04 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 11/19/2021 10:04 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.003		
7/28/2016				<0.003		
9/20/2016				<0.003		
11/8/2016				<0.003		
1/16/2017				<0.003		
3/9/2017				<0.003		
5/2/2017				<0.003		
7/10/2017				<0.003		
10/12/2017					<0.003	<0.003
11/20/2017					<0.003	
11/21/2017						<0.003
1/11/2018						<0.003
1/12/2018					<0.003	
2/19/2018						<0.003
2/20/2018					<0.003	
3/30/2018				<0.003		
4/3/2018					<0.003	<0.003
6/27/2018						<0.003
6/28/2018					<0.003	
8/7/2018					0.0015 (J)	<0.003
9/24/2018					<0.003	<0.003
3/6/2019				<0.003		
4/4/2019				<0.003		
8/22/2019					<0.003	<0.003
9/26/2019	<0.003					
9/27/2019				0.00029 (J)		
3/25/2020	<0.003				0.00063 (J)	<0.003
3/26/2020				<0.003		
9/23/2020		0.00065 (J)				
9/24/2020	<0.003		0.00033 (J)	0.00085 (J)		
9/25/2020					0.00061 (J)	<0.003
2/9/2021	0.00037 (J)	0.0011 (J)	<0.003	0.00052 (J)	0.00031 (J)	
2/10/2021						0.0014 (J)
3/3/2021	0.025	0.00062 (J)				
3/4/2021			<0.003	<0.003	<0.003	<0.003
8/25/2021		<0.003		<0.003		
8/26/2021			<0.003		<0.003	<0.003
9/1/2021	0.0024 (J)					
Mean	0.006128	0.001343	0.002333	0.002568	0.002361	0.002886
Std. Dev.	0.009301	0.001127	0.001335	0.0009666	0.001078	0.0004276
Upper Lim.	0.01261	0.001325	0.003	0.003	0.003	0.003
Lower Lim.	0.0002101	0.0003728	0.00033	0.00085	0.00063	0.0014

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
6/8/2016						<0.003
8/1/2016						<0.003
8/30/2016	<0.003					
8/31/2016		<0.003				
9/1/2016			<0.003			
9/20/2016						0.0009 (J)
11/8/2016						<0.003
11/15/2016			<0.003			
11/16/2016	<0.003	<0.003				
1/17/2017						<0.003
2/24/2017		<0.003				
2/27/2017	<0.003		0.0011 (J)			
3/8/2017						<0.003
5/2/2017						<0.003
5/9/2017			<0.003			
5/10/2017	<0.003	<0.003				
7/7/2017						<0.003
7/11/2017	<0.003	<0.003				
7/13/2017			<0.003			
10/11/2017			<0.003			
10/12/2017	<0.003	<0.003			<0.003	
11/21/2017					<0.003	
1/11/2018					<0.003	
2/20/2018					<0.003	
3/30/2018						<0.003
4/3/2018					<0.003	
4/4/2018	<0.003	<0.003	<0.003			
6/29/2018					<0.003	
8/6/2018					<0.003	
9/20/2018	<0.003	<0.003	<0.003			
9/24/2018					<0.003	
3/5/2019						<0.003
4/4/2019						<0.003
8/21/2019		<0.003				
8/22/2019	<0.003					
9/26/2019			<0.003	<0.003		<0.003
3/25/2020	<0.003	0.00031 (J)	0.00053 (J)	<0.003		
3/26/2020						<0.003
9/23/2020						<0.003
9/24/2020	<0.003		<0.003	<0.003		
9/25/2020		<0.003			0.0014 (J)	
2/9/2021		<0.003	<0.003		0.00035 (J)	<0.003
2/10/2021	0.00053 (J)			<0.003		
3/3/2021						<0.003
3/4/2021	<0.003	<0.003	<0.003	0.00039 (J)	<0.003	
8/25/2021	<0.003				<0.003	
9/1/2021			<0.003	<0.003		<0.003
9/27/2021		<0.003				
Mean	0.002824	0.002808	0.002688	0.002565	0.002646	0.002876
Std. Dev.	0.0006601	0.0007189	0.0008013	0.001066	0.0008569	0.0005093
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.00053	0.00031	0.0011	0.00039	0.0014	0.0009

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-36A
9/2/2016	<0.003
11/14/2016	0.0014 (J)
2/28/2017	0.0004 (J)
5/9/2017	<0.003
7/13/2017	<0.003
9/22/2017	<0.003
9/29/2017	<0.003
10/6/2017	<0.003
3/30/2018	<0.003
3/6/2019	0.0011 (J)
4/4/2019	0.0041
9/26/2019	0.0065
3/25/2020	0.0011 (J)
10/7/2020	<0.003
2/10/2021	0.028
3/4/2021	0.0015 (J)
9/3/2021	0.0016 (J)
Mean	0.0041
Std. Dev.	0.006318
Upper Lim.	0.0041
Lower Lim.	0.0014

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/7/2016			<0.005			
7/28/2016			<0.005			
8/30/2016						0.0023 (J)
9/20/2016			<0.005			
11/8/2016			<0.005			
11/16/2016						0.0017 (J)
1/16/2017			<0.005			
2/27/2017						0.002 (J)
3/9/2017			<0.005			
5/2/2017			<0.005			
5/10/2017						0.0022 (J)
7/10/2017			<0.005			
7/11/2017						0.003 (J)
10/12/2017				0.0023 (J)	0.0011 (J)	0.0031 (J)
11/20/2017				0.0008 (J)		
11/21/2017					<0.005	
1/11/2018					<0.005	
1/12/2018				0.001 (J)		
2/19/2018					<0.005	
2/20/2018				0.00096 (J)		
3/30/2018			<0.005			
4/3/2018				0.0015 (J)	0.00072 (J)	
4/4/2018						0.0023 (J)
6/12/2018			<0.005			
6/27/2018					0.00062 (J)	
6/28/2018				0.0017 (J)		
8/7/2018				0.00072 (J)	<0.005	
9/20/2018						0.0018 (J)
9/24/2018				0.0017 (J)	0.001 (J)	
9/27/2018			<0.005			
3/6/2019			<0.005			
4/4/2019			<0.005			
8/22/2019				0.00055 (J)	0.00036 (J)	0.00089 (J)
9/27/2019			<0.005			
10/9/2019				0.00057 (J)	0.00052 (J)	0.00078 (J)
3/25/2020				0.00068 (J)	0.001 (J)	0.0013 (J)
3/26/2020			0.0012 (J)			
9/23/2020	<0.005					
9/24/2020		0.0015 (J)	<0.005			<0.005
9/25/2020				<0.005	<0.005	
2/9/2021	0.001 (J)	0.00095 (J)	<0.005	0.00098 (J)		
2/10/2021					<0.005	0.0016 (J)
3/3/2021	0.00079 (J)					
3/4/2021		<0.005	<0.005	<0.005	<0.005	<0.005
8/25/2021	<0.005		<0.005			0.0014 (J)
8/26/2021		<0.005		0.0013 (J)	<0.005	
Mean	0.002947	0.003112	0.0048	0.001651	0.003021	0.002291
Std. Dev.	0.002372	0.002191	0.0008718	0.001446	0.002197	0.001282
Upper Lim.	0.005	0.001914	0.005	0.00204	0.005	0.003008
Lower Lim.	0.00079	0.0006656	0.0012	0.0007945	0.00062	0.001423

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/8/2016					<0.005	
8/1/2016					<0.005	
8/31/2016	<0.005					
9/1/2016		<0.005				
9/2/2016						<0.005
9/20/2016					<0.005	
11/8/2016					<0.005	
11/14/2016						<0.005
11/15/2016		<0.005				
11/16/2016	<0.005					
1/17/2017					<0.005	
2/24/2017	<0.005					
2/27/2017		<0.005				
2/28/2017						0.0006 (J)
3/8/2017					<0.005	
5/2/2017					<0.005	
5/9/2017		<0.005				0.0006 (J)
5/10/2017	<0.005					
7/7/2017					<0.005	
7/11/2017	<0.005					
7/13/2017		<0.005				<0.005
9/22/2017						<0.005
9/29/2017						<0.005
10/6/2017						<0.005
10/11/2017		0.0006 (J)				
10/12/2017	<0.005			0.0014 (J)		
11/21/2017				0.0008 (J)		
1/11/2018				0.0006 (J)		
2/20/2018				<0.005		
3/30/2018					<0.005	<0.005
4/3/2018				0.0012 (J)		
4/4/2018	<0.005	<0.005				
6/12/2018					<0.005	
6/13/2018						0.00066 (J)
6/29/2018				0.0011 (J)		
8/6/2018				<0.005		
9/20/2018	0.00099 (J)	0.001 (J)				
9/24/2018				0.00094 (J)		
9/26/2018					<0.005	<0.005
10/16/2018			0.00069 (J)			
3/5/2019					<0.005	
3/6/2019						<0.005
4/4/2019					<0.005	<0.005
8/21/2019	<0.005					
9/26/2019		<0.005	<0.005		<0.005	<0.005
10/9/2019	0.00051 (J)					
3/25/2020	0.0007 (J)	0.00086 (J)	<0.005			<0.005
3/26/2020					0.0015 (J)	
9/23/2020					<0.005	
9/24/2020		<0.005	<0.005			
9/25/2020	<0.005			<0.005		
10/7/2020						<0.005

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/9/2021	<0.005	<0.005		0.0015 (J)	<0.005	
2/10/2021			0.00096 (J)			0.00088 (J)
3/3/2021					<0.005	
3/4/2021	<0.005	<0.005	<0.005	<0.005		<0.005
8/25/2021				0.0014 (J)		
9/1/2021		<0.005	<0.005		<0.005	
9/3/2021						<0.005
9/27/2021	<0.005					
Mean	0.004147	0.004104	0.003807	0.002412	0.004816	0.004092
Std. Dev.	0.001769	0.001782	0.002039	0.001928	0.000803	0.001808
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00099	0.001	0.00069	0.0008	0.0015	0.00088

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-23S	YGWC-38
6/7/2016					0.045	
7/28/2016					0.0511	
9/20/2016					0.0561	
11/8/2016					0.054	
1/16/2017					0.0528	
3/9/2017					0.0469	
5/2/2017					0.0427	
7/10/2017					0.0395	
10/12/2017						0.0269
11/20/2017						0.0255
1/12/2018						0.0236
2/20/2018						0.0255
3/30/2018					0.03	
4/3/2018						0.023
6/12/2018					0.024	
6/28/2018						0.024
8/7/2018						0.023
9/24/2018						0.021
9/27/2018					0.022	
10/16/2018	0.048					
3/6/2019					0.019	
4/4/2019					0.019	
8/22/2019						0.019
9/26/2019	0.047					
9/27/2019					0.018	
10/9/2019						0.019
3/25/2020	0.04					0.018
3/26/2020					0.027	
9/23/2020		0.0092 (J)	0.0063 (J)			
9/24/2020	0.028			0.057	0.035	
9/25/2020						0.015
2/9/2021	0.039	0.0085 (J)	0.02	0.042	0.042	0.016
3/3/2021	0.035	0.0082	0.021			
3/4/2021				0.039	0.043	0.016
8/25/2021			0.0037 (J)		0.049	
8/26/2021				0.036		0.016
9/1/2021	0.075	0.0072				
Mean	0.04457	0.008275	0.01275	0.0435	0.03769	0.02077
Std. Dev.	0.01506	0.0008302	0.009021	0.009327	0.01303	0.00402
Upper Lim.	0.06247	0.01016	0.03323	0.06468	0.04532	0.02349
Lower Lim.	0.02668	0.00639	-0.007731	0.02232	0.03006	0.01804

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-41	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37
8/30/2016		0.0455				
8/31/2016			0.0065 (J)			
9/1/2016				0.077		
11/15/2016				0.0772		
11/16/2016		0.0541	0.0092 (J)			
2/24/2017			0.0144			
2/27/2017		0.0573		0.0888		
5/9/2017				0.0792		
5/10/2017		0.0517	0.0173			
7/11/2017		0.0451	0.0183			
7/13/2017				0.0839		
10/11/2017				0.078		
10/12/2017	0.0394	0.0429	0.0205			0.064
11/21/2017	0.032					0.0579
1/11/2018	0.03					0.0549
2/19/2018	0.0308					
2/20/2018						0.0593
4/3/2018	0.03					0.051
4/4/2018		0.041	0.024	0.074		
6/27/2018	0.028					
6/29/2018						0.054
8/6/2018						0.048
8/7/2018	0.027					
9/20/2018		0.038	0.035	0.074		
9/24/2018	0.026					0.047
10/16/2018					0.063	
8/21/2019			0.03			
8/22/2019	0.021	0.031				
9/26/2019				0.065	0.039	
10/9/2019	0.021	0.027	0.04			
3/25/2020	0.021	0.03	0.033	0.071	0.039	
9/24/2020		0.026		0.066	0.034	
9/25/2020	0.016		0.046			0.034
2/9/2021			0.041	0.071		0.036
2/10/2021	0.017	0.031			0.032	
3/4/2021	0.017	0.03	0.039	0.069	0.033	0.036
8/25/2021		0.027				0.035
8/26/2021	0.018					
9/1/2021				0.066	0.067	
9/27/2021			0.0097			
Mean	0.02495	0.03851	0.02559	0.07429	0.04386	0.04809
Std. Dev.	0.006866	0.01058	0.013	0.006962	0.01475	0.01057
Upper Lim.	0.0296	0.04568	0.0344	0.07922	0.067	0.05638
Lower Lim.	0.02029	0.03134	0.01678	0.06936	0.032	0.0398

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-24SA	YGWC-36A
6/8/2016	0.02	
8/1/2016	0.02	
9/2/2016		0.0409
9/20/2016	0.0203	
11/8/2016	0.0191	
11/14/2016		0.0182
1/17/2017	0.0192	
2/28/2017		0.023
3/8/2017	0.0189	
5/2/2017	0.019	
5/9/2017		0.0349
7/7/2017	0.019	
7/13/2017		0.0484
9/22/2017		0.0491
9/29/2017		0.0452
10/6/2017		0.0508
3/30/2018	0.02	0.043
6/12/2018	0.018	
6/13/2018		0.046
9/26/2018	0.019	0.048
3/5/2019	0.019	
3/6/2019		0.041
4/4/2019	0.02	0.042
9/26/2019	0.017	0.025
3/25/2020		0.025
3/26/2020	0.019	
9/23/2020	0.026	
10/7/2020		0.04
2/9/2021	0.031	
2/10/2021		0.035
3/3/2021	0.025	
3/4/2021		0.028
9/1/2021	0.025	
9/3/2021		0.038
Mean	0.02076	0.03797
Std. Dev.	0.00347	0.009852
Upper Lim.	0.0203	0.04374
Lower Lim.	0.0189	0.0322

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.0005		
7/28/2016				<0.0005		
9/20/2016				0.0001 (J)		
11/8/2016				<0.0005		
1/16/2017				0.0001 (J)		
3/9/2017				0.0001 (J)		
5/2/2017				9E-05 (J)		
7/10/2017				<0.0005		
10/12/2017					0.0057	0.0036
11/20/2017					0.0053	
11/21/2017						0.0036
1/11/2018						0.0037
1/12/2018					0.0053	
2/19/2018						0.0039
2/20/2018					0.0053	
3/30/2018				<0.0005		
4/3/2018					0.0056	0.0037
6/12/2018				8.1E-05 (J)		
6/27/2018						0.0038
6/28/2018					0.0059	
8/7/2018					0.0058	0.0037
9/24/2018					0.0051	0.0032
9/27/2018				9E-05 (J)		
10/16/2018	<0.0005					
3/6/2019				6.6E-05 (J)		
4/4/2019				7.2E-05 (J)		
8/22/2019					0.0049	0.0026 (J)
9/26/2019	<0.0005					
9/27/2019				7.7E-05 (J)		
10/9/2019					0.0046	0.0026 (J)
1/15/2020			0.00017 (J)			
3/25/2020	0.00037 (J)				0.0038	0.0026 (J)
3/26/2020				9E-05 (J)		
9/23/2020		<0.0005				
9/24/2020	5.8E-05 (J)		8.6E-05 (J)	0.00015 (J)		
9/25/2020					0.0033	0.002 (J)
2/9/2021	<0.0005	5.1E-05 (J)	0.00015 (J)	0.00015 (J)	0.0029 (J)	
2/10/2021						0.0015 (J)
3/3/2021	<0.0005	<0.0005				
3/4/2021			0.00013 (J)	0.00013 (J)	0.0029	0.0015
8/25/2021				0.00019 (J)		
8/26/2021			0.00012 (J)		0.0028	0.0012
9/1/2021	9.5E-05 (J)	6.5E-05 (J)				
Mean	0.0003604	0.000279	0.0001312	0.0002098	0.004613	0.00288
Std. Dev.	0.0002	0.0002553	3.174E-05	0.0001808	0.001149	0.0009518
Upper Lim.	0.0005	0.0005	0.0001844	0.0005	0.005425	0.0038
Lower Lim.	5.8E-05	5.1E-05	7.802E-05	8.1E-05	0.004108	0.0015

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
6/8/2016						<0.0005
8/1/2016						0.0001 (J)
8/30/2016	9E-05 (J)					
8/31/2016		<0.0005				
9/1/2016			0.0001 (J)			
9/20/2016						0.0001 (J)
11/8/2016						<0.0005
11/15/2016			0.0001 (J)			
11/16/2016	<0.0005	<0.0005				
1/17/2017						0.0001 (J)
2/24/2017		<0.0005				
2/27/2017	<0.0005		0.0001 (J)			
3/8/2017						0.0001 (J)
5/2/2017						0.0001 (J)
5/9/2017			0.0001 (J)			
5/10/2017	9E-05 (J)	<0.0005				
7/7/2017						0.0001 (J)
7/11/2017	0.0001 (J)	<0.0005				
7/13/2017			0.0001 (J)			
10/11/2017			0.0001 (J)			
10/12/2017	<0.0005	0.0001 (J)			0.0004 (J)	
11/21/2017					0.0004 (J)	
1/11/2018					0.0003 (J)	
2/20/2018					<0.0005	
3/30/2018						<0.0005
4/3/2018					<0.0005	
4/4/2018	<0.0005	<0.0005	<0.0005			
6/12/2018						0.00012 (J)
6/29/2018					0.00033 (J)	
8/6/2018					0.0002 (J)	
8/30/2018				0.00052 (J)		
9/20/2018	<0.0005	0.00029 (J)	0.00011 (J)			
9/24/2018					0.00029 (J)	
9/26/2018						0.00014 (J)
10/16/2018				0.00036 (J)		
3/5/2019						0.00016 (J)
4/4/2019						0.00015 (J)
8/21/2019		0.0003 (J)				
8/22/2019	<0.0005					
9/26/2019			0.00013 (J)	<0.0005		0.00014 (J)
10/9/2019	<0.0005	0.00034 (J)				
3/25/2020	<0.0005	0.00034 (J)	0.00013 (J)	<0.0005		
3/26/2020						0.00016 (J)
9/23/2020						6.1E-05 (J)
9/24/2020	6.7E-05 (J)		0.00013 (J)	0.00033 (J)		
9/25/2020		0.00054 (J)			0.00031 (J)	
2/9/2021		0.00053 (J)	0.00013 (J)		0.00029 (J)	0.00013 (J)
2/10/2021	5.7E-05 (J)			0.00025 (J)		
3/3/2021						9.9E-05 (J)
3/4/2021	<0.0005	0.00056	0.0001 (J)	0.00025 (J)	0.00017 (J)	
8/25/2021	<0.0005				0.00059	
9/1/2021			0.00012 (J)	0.00045 (J)		0.00014 (J)

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
9/27/2021		0.00015 (J)				
Mean	0.0003603	0.00041	0.0001393	0.000395	0.0003567	0.0001789
Std. Dev.	0.0002048	0.000147	0.0001047	0.0001122	0.0001256	0.0001451
Upper Lim.	0.0005	0.00053	0.00013	0.0004523	0.0003866	0.00016
Lower Lim.	9E-05	0.00029	0.0001	0.0002517	0.0002088	0.0001

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-36A
9/2/2016	0.0003 (J)
11/14/2016	9E-05 (J)
2/28/2017	0.0001 (J)
5/9/2017	0.0002 (J)
7/13/2017	0.0003 (J)
9/22/2017	0.0003 (J)
9/29/2017	0.0003 (J)
10/6/2017	0.0003 (J)
3/30/2018	<0.0005
6/13/2018	0.00035 (J)
9/26/2018	0.00032 (J)
3/6/2019	0.00029 (J)
4/4/2019	0.00033 (J)
9/26/2019	0.00029 (J)
3/25/2020	0.00022 (J)
10/7/2020	0.00014 (J)
2/10/2021	9.9E-05 (J)
3/4/2021	0.00016 (J)
9/3/2021	0.00035 (J)
Mean	0.0002599
Std. Dev.	0.000106
Upper Lim.	0.000322
Lower Lim.	0.0001979

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-5	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/7/2016			<0.0005			
7/28/2016			<0.0005			
8/30/2016						<0.0005
9/20/2016			<0.0005			
11/8/2016			7E-05 (J)			
11/16/2016						<0.0005
1/16/2017			<0.0005			
2/27/2017						<0.0005
3/9/2017			<0.0005			
5/2/2017			<0.0005			
5/10/2017						0.0002 (J)
7/10/2017			<0.0005			
7/11/2017						0.0005 (J)
10/12/2017				0.003	0.0002 (J)	0.0006 (J)
11/20/2017				0.0027		
11/21/2017					0.0003 (J)	
1/11/2018					0.0002 (J)	
1/12/2018				0.0029		
2/19/2018					<0.0005	
2/20/2018				0.0029		
3/30/2018			<0.0005			
4/3/2018				0.0027	<0.0005	
4/4/2018						<0.0005
6/12/2018			<0.0005			
6/27/2018					0.00025 (J)	
6/28/2018				0.0029		
8/7/2018				0.0027	0.00024 (J)	
9/20/2018						0.0002 (J)
9/24/2018				0.0027	0.00021 (J)	
9/27/2018			<0.0005			
10/16/2018	0.00014 (J)					
3/6/2019			<0.0005			
4/4/2019			<0.0005			
8/22/2019				0.0023 (J)	0.00015 (J)	0.00017 (J)
9/26/2019	<0.0005					
9/27/2019			<0.0005			
10/9/2019				0.0021 (J)	0.00017 (J)	0.00025 (J)
3/25/2020	<0.0005			0.0018 (J)	0.00018 (J)	0.00021 (J)
3/26/2020			<0.0005			
9/24/2020	0.00017 (J)	0.00018 (J)	<0.0005			0.00014 (J)
9/25/2020				0.0015 (J)	0.00014 (J)	
2/9/2021	0.00013 (J)	0.00025 (J)	<0.0005	0.0014 (J)		
2/10/2021					<0.0005	<0.0005
3/3/2021	<0.0005					
3/4/2021		0.00018 (J)	<0.0005	0.0013	<0.0005	<0.0005
8/25/2021			<0.0005			<0.0005
8/26/2021		0.00021 (J)		0.0011	<0.0005	
9/1/2021	0.00023 (J)					
Mean	0.00031	0.000205	0.0004774	0.002267	0.0003027	0.0003847
Std. Dev.	0.0001806	3.317E-05	9.865E-05	0.0006747	0.0001496	0.0001638
Upper Lim.	0.0005	0.0002803	0.0005	0.0029	0.0005	0.0006
Lower Lim.	0.00013	0.0001297	7E-05	0.0014	0.00017	0.0002

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-49	PZ-35	PZ-37	YGWC-36A
9/1/2016	<0.0005			
9/2/2016				<0.0005
11/14/2016				9E-05 (J)
11/15/2016	<0.0005			
2/27/2017	7E-05 (J)			
2/28/2017				0.0001 (J)
5/9/2017	<0.0005			0.0002 (J)
7/13/2017	<0.0005			0.0002 (J)
9/22/2017				0.0002 (J)
9/29/2017				0.0002 (J)
10/6/2017				0.0002 (J)
10/11/2017	<0.0005			
10/12/2017			0.0002 (J)	
11/21/2017			0.0002 (J)	
1/11/2018			0.0004 (J)	
2/20/2018			<0.0005	
3/30/2018				<0.0005
4/3/2018			<0.0005	
4/4/2018	<0.0005			
6/13/2018				0.00019 (J)
6/29/2018			0.00099 (J)	
8/6/2018			0.00063 (J)	
9/20/2018	<0.0005			
9/24/2018			0.00069 (J)	
9/26/2018				0.00018 (J)
10/16/2018		<0.0005		
3/6/2019				0.00015 (J)
4/4/2019				0.00019 (J)
9/26/2019	<0.0005	<0.0005		0.00017 (J)
3/25/2020	<0.0005	0.00016 (J)		0.00019 (J)
9/24/2020	<0.0005	<0.0005		
9/25/2020			0.00039 (J)	
10/7/2020				0.00012 (J)
2/9/2021	<0.0005		0.00042 (J)	
2/10/2021		<0.0005		<0.0005
3/4/2021	<0.0005	<0.0005	0.00028 (J)	<0.0005
8/25/2021			0.00094	
9/1/2021	<0.0005	<0.0005		
9/3/2021				<0.0005
Mean	0.0004693	0.0004514	0.0005117	0.0002568
Std. Dev.	0.0001149	0.0001285	0.0002597	0.000153
Upper Lim.	0.0005	0.0005	0.0006865	0.0005
Lower Lim.	7E-05	0.00016	0.0002751	0.00015

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.005		
7/28/2016				0.0008 (J)		
9/20/2016				<0.005		
11/8/2016				<0.005		
1/16/2017				<0.005		
3/9/2017				<0.005		
5/2/2017				0.0007 (J)		
7/10/2017				<0.005		
10/12/2017					0.0005 (J)	<0.005
11/20/2017					<0.005	
11/21/2017						<0.005
1/11/2018						<0.005
1/12/2018					<0.005	
2/19/2018						<0.005
2/20/2018					<0.005	
3/30/2018				<0.005		
4/3/2018					<0.005	<0.005
6/27/2018						<0.005
6/28/2018					<0.005	
8/7/2018					<0.005	<0.005
9/24/2018					<0.005	<0.005
3/6/2019				<0.005		
8/22/2019					<0.005	<0.005
10/9/2019					<0.005	<0.005
3/25/2020	0.00058 (J)				0.00065 (J)	0.00039 (J)
3/26/2020				0.0019 (J)		
9/23/2020		0.00071 (J)	<0.005			
9/24/2020	0.00074 (J)			0.0011 (J)		
9/25/2020					<0.005	<0.005
2/9/2021	0.001 (J)	0.0011 (J)	0.00057 (J)	0.00086 (J)	<0.005	
2/10/2021						<0.005
3/3/2021	0.00076 (J)	0.0012 (J)	<0.005			
3/4/2021				0.00078 (J)	<0.005	<0.005
8/25/2021			<0.005	<0.005		
8/26/2021					<0.005	<0.005
9/1/2021	<0.005	0.003 (J)				
Mean	0.001616	0.001503	0.003892	0.003409	0.00441	0.004693
Std. Dev.	0.001898	0.00102	0.002215	0.002034	0.001557	0.00119
Upper Lim.	0.005	0.003819	0.005	0.005	0.005	0.005
Lower Lim.	0.00058	-0.0008143	0.00057	0.0008	0.00065	0.00039

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
6/8/2016						<0.005
8/1/2016						<0.005
8/30/2016	<0.005					
8/31/2016		<0.005				
9/1/2016			0.0013 (J)			
9/20/2016						<0.005
11/8/2016						<0.005
11/15/2016			0.0014 (J)			
11/16/2016	<0.005	<0.005				
1/17/2017						<0.005
2/24/2017		<0.005				
2/27/2017	<0.005		0.0016 (J)			
3/8/2017						<0.005
5/2/2017						0.0011 (J)
5/9/2017			0.0017 (J)			
5/10/2017	0.0006 (J)	0.0005 (J)				
7/7/2017						<0.005
7/11/2017	<0.005	<0.005				
7/13/2017			0.0019 (J)			
10/11/2017			0.0014 (J)			
10/12/2017	<0.005	<0.005			0.0019 (J)	
11/21/2017					0.0017 (J)	
1/11/2018					0.001 (J)	
2/20/2018					<0.005	
3/30/2018						<0.005
4/3/2018					<0.005	
4/4/2018	<0.005	<0.005	<0.005			
6/29/2018					<0.005	
8/6/2018					<0.005	
9/20/2018	<0.005	<0.005	0.0017 (J)			
9/24/2018					<0.005	
3/5/2019						<0.005
8/21/2019		0.00062 (J)				
8/22/2019	<0.005					
10/9/2019	0.00043 (J)	0.00074 (J)				
3/25/2020	0.0013 (J)	<0.005	0.0019 (J)	0.0012 (J)		
3/26/2020						0.00094 (J)
9/23/2020						<0.005
9/24/2020	<0.005		0.0019 (J)	0.00061 (J)		
9/25/2020		0.00071 (J)			<0.005	
2/9/2021		<0.005	0.002 (J)		<0.005	0.0011 (J)
2/10/2021	<0.005			0.0006 (J)		
3/3/2021						<0.005
3/4/2021	<0.005	<0.005	0.0017 (J)	0.0007 (J)	<0.005	
8/25/2021	<0.005				<0.005	
9/1/2021			0.002 (J)	<0.005		<0.005
9/27/2021		<0.005				
Mean	0.004155	0.003838	0.001962	0.001622	0.004133	0.004209
Std. Dev.	0.001757	0.001995	0.0009421	0.001904	0.001581	0.001637
Upper Lim.	0.005	0.005	0.002	0.005	0.005	0.005
Lower Lim.	0.0013	0.00071	0.0014	0.0006	0.0017	0.0011

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-36A
9/2/2016	<0.005
11/14/2016	0.0035
2/28/2017	<0.005
5/9/2017	<0.005
7/13/2017	<0.005
9/22/2017	<0.005
9/29/2017	<0.005
10/6/2017	<0.005
3/30/2018	<0.005
3/6/2019	<0.005
3/25/2020	0.00074 (J)
10/7/2020	0.0013 (J)
2/10/2021	0.00094 (J)
3/4/2021	<0.005
9/3/2021	<0.005
Mean	0.004099
Std. Dev.	0.001656
Upper Lim.	0.005
Lower Lim.	0.0013

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-41	YGWC-42
8/30/2016						0.0025 (J)
11/16/2016						0.002 (J)
2/27/2017						0.0021 (J)
5/10/2017						0.0021 (J)
7/11/2017						0.0014 (J)
10/12/2017					0.0011 (J)	0.0017 (J)
11/21/2017					0.0003 (J)	
1/11/2018					0.0003 (J)	
2/19/2018					<0.005	
4/3/2018					<0.005	
4/4/2018						<0.005
6/27/2018					0.00069 (J)	
8/7/2018					<0.005	
9/20/2018						0.003 (J)
9/24/2018					<0.005	
10/16/2018	0.032					
8/22/2019					<0.005	0.0019 (J)
9/26/2019	0.015					
10/9/2019					<0.005	0.0019 (J)
1/3/2020	<0.005					
3/25/2020	<0.005				<0.005	0.0018 (J)
9/23/2020		0.0025 (J)	0.00052 (J)			
9/24/2020	0.01			0.00077 (J)		0.0017 (J)
9/25/2020					<0.005	
2/9/2021	0.03	0.001 (J)	0.00063 (J)	<0.005		
2/10/2021					<0.005	0.0019 (J)
3/3/2021	0.018	0.00082 (J)	0.001 (J)			
3/4/2021				<0.005	<0.005	0.0018 (J)
8/25/2021			0.00041 (J)			0.0014 (J)
8/26/2021				<0.005	<0.005	
9/1/2021	0.022	0.00093 (J)				
Mean	0.01712	0.001313	0.00064	0.003942	0.003826	0.002147
Std. Dev.	0.01043	0.0007951	0.0002563	0.002115	0.002023	0.0008847
Upper Lim.	0.02746	0.0025	0.001222	0.005	0.005	0.0025
Lower Lim.	0.006788	0.00082	5.821E-05	0.00077	0.00069	0.0017

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-36A
8/31/2016	<0.005				
9/1/2016		<0.005			
9/2/2016					0.0006 (J)
11/14/2016					<0.005
11/15/2016		0.0006 (J)			
11/16/2016	<0.005				
2/24/2017	<0.005				
2/27/2017		0.0008 (J)			
2/28/2017					<0.005
5/9/2017		<0.005			<0.005
5/10/2017	<0.005				
7/11/2017	<0.005				
7/13/2017		0.0005 (J)			<0.005
9/22/2017					<0.005
9/29/2017					<0.005
10/6/2017					<0.005
10/11/2017		0.0006 (J)			
10/12/2017	0.0006 (J)			0.0078 (J)	
11/21/2017				0.0097 (J)	
1/11/2018				0.0131	
2/20/2018				0.0162	
3/30/2018					<0.005
4/3/2018				0.015	
4/4/2018	<0.005	<0.005			
6/13/2018					<0.005
6/29/2018				0.013	
8/6/2018				0.0053 (J)	
9/20/2018	0.0034 (J)	<0.005			
9/24/2018				0.0071 (J)	
9/26/2018					<0.005
10/16/2018			<0.005		
3/6/2019					<0.005
4/4/2019					<0.005
8/21/2019	0.0026 (J)				
9/26/2019		<0.005	<0.005		0.00048 (J)
10/9/2019	0.0023 (J)				
3/25/2020	0.0016 (J)	<0.005	0.0059		0.00038 (J)
9/24/2020		<0.005	<0.005		
9/25/2020	0.0018 (J)			0.0023 (J)	
10/7/2020					0.00086 (J)
2/9/2021	0.0017 (J)	<0.005		0.0023 (J)	
2/10/2021			<0.005		0.00038 (J)
3/4/2021	0.0015 (J)	<0.005	<0.005	0.003 (J)	<0.005
8/25/2021				0.0068	
9/1/2021		<0.005	<0.005		
9/3/2021					<0.005
9/27/2021	<0.005				
Mean	0.003367	0.00375	0.005129	0.008467	0.003826
Std. Dev.	0.001688	0.002052	0.0003402	0.004928	0.00202
Upper Lim.	0.005	0.005	0.0059	0.01233	0.005
Lower Lim.	0.0016	0.0006	0.005	0.0046	0.0006

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-23S	YGWC-38
6/7/2016					0.303 (U)	
7/28/2016					0.386 (U)	
9/20/2016					1.47	
11/8/2016					0.22 (U)	
1/16/2017					0.147 (U)	
3/9/2017					0.0892 (U)	
5/2/2017					0.149 (U)	
7/10/2017					0.815 (U)	
10/12/2017						1.24
11/20/2017						0.342 (U)
1/12/2018						1.04
2/20/2018						1.6 (U)
3/30/2018					0.659 (U)	
4/3/2018						0.726 (U)
6/12/2018					1.03 (U)	
6/28/2018						1.06 (U)
8/7/2018						1.21
9/24/2018						1.52
9/27/2018					1.06 (U)	
10/16/2018	0.384 (U)					
3/6/2019					0.736 (U)	
4/4/2019					0.474 (U)	
8/22/2019						1.97
9/27/2019					0.684 (U)	
10/8/2019						0.751 (U)
3/25/2020	0.525 (U)					0.321 (U)
3/26/2020					0.281 (U)	
9/23/2020		0.0813 (U)	1.2 (U)			
9/24/2020	0.547 (U)			0.668 (U)	0.788 (U)	
9/25/2020						0.246 (U)
2/9/2021	0.866 (U)	0.492 (U)	0.659 (U)	1.07 (U)	0.464 (U)	0.626 (U)
3/3/2021	0.377 (U)	0.563 (U)	1.07			
3/4/2021				1.46	0.771 (U)	0.816 (U)
8/25/2021			0.0991 (U)		0.624 (U)	
8/26/2021				0.724 (U)		0.427 (U)
9/1/2021	0.676 (U)	0.761 (U)				
Mean	0.5625	0.4743	0.757	0.9805	0.5869	0.9263
Std. Dev.	0.186	0.2857	0.4955	0.3658	0.3632	0.514
Upper Lim.	0.818	1.123	1.882	1.811	0.7995	1.275
Lower Lim.	0.307	-0.1743	-0.368	0.1501	0.3742	0.578

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-41	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37
8/30/2016		2.99				
8/31/2016			0.926 (U)			
9/1/2016				1.2		
11/15/2016				0.645 (U)		
11/16/2016		4.01	0.773 (U)			
2/24/2017			0.661 (U)			
2/27/2017		2.5		0.244 (U)		
5/9/2017				0.519 (U)		
5/10/2017		2.55	1.27			
7/11/2017		3.94	1.02			
7/13/2017				0.5 (U)		
10/11/2017				1.41		
10/12/2017	0.641 (U)	3.57	1.58			1.83
11/21/2017	2.01					1.33
1/11/2018	0.919 (U)					1.53
2/19/2018	1.82					
2/20/2018						2.75
4/3/2018	0.911 (U)					1.47
4/4/2018		1.9	1.71	0.442 (U)		
6/27/2018	0.429 (U)					
6/29/2018						1.69
8/6/2018						1.69
8/7/2018	0.579 (U)					
9/20/2018		1.94	2.8	1.14 (U)		
9/24/2018	1.39					2.26
10/16/2018					0.363 (U)	
8/21/2019			3.16			
8/22/2019	2.03	1.59				
9/26/2019				1.16 (U)		
10/8/2019	0.609 (U)	0.995 (U)	3.65			
3/25/2020	0.568 (U)	1.17 (U)	3.04	1.2 (U)	0.197 (U)	
9/24/2020		0.751 (U)		1.57 (U)	1.07 (U)	
9/25/2020	0.769 (U)		4.75			1.68 (U)
2/9/2021			6.38	0.137 (U)		1.52
2/10/2021	0.548 (U)	0.612 (U)			0.546 (U)	
3/4/2021	1.23	1.02	6.02	0.579 (U)	0.397 (U)	1.49
8/25/2021		0.978 (U)				1.41
8/26/2021	0.356 (U)					
9/1/2021				0.686 (U)	0.696 (U)	
9/27/2021			1.54			
Mean	0.9873	2.034	2.619	0.8166	0.5448	1.721
Std. Dev.	0.5741	1.17	1.878	0.4522	0.3081	0.4054
Upper Lim.	1.309	2.827	3.631	1.137	0.968	1.982
Lower Lim.	0.593	1.242	1.305	0.4963	0.1216	1.431

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-24SA	YGWC-36A
6/8/2016	1.06	
8/1/2016	0.467 (U)	
9/2/2016		0.873 (U)
9/20/2016	0.853 (U)	
9/22/2016		0.667 (U)
9/29/2016		1.63
10/6/2016		0.641 (U)
11/8/2016	0.433 (U)	
11/14/2016		0.0451 (U)
1/17/2017	0.0759 (U)	
2/28/2017		1.34 (U)
3/8/2017	0.479 (U)	
5/2/2017	0.506 (U)	
5/9/2017		0.309 (U)
7/7/2017	0.713 (U)	
7/13/2017		0.618 (U)
3/30/2018	0.409 (U)	0.721 (U)
6/12/2018	0.728 (U)	
6/13/2018		1.04 (U)
9/26/2018	0.981	0.604 (U)
3/5/2019	0.837 (U)	
3/6/2019		0.919 (U)
4/4/2019		1.05 (U)
4/9/2019	0.502 (U)	
9/26/2019	0.964 (U)	0.979 (U)
3/25/2020		1.22 (U)
3/26/2020	0.511 (U)	
9/23/2020	0.786 (U)	
10/7/2020		1.58
2/9/2021	0.678 (U)	
2/10/2021		0.466 (U)
3/3/2021	0.415 (U)	
3/4/2021		0.0671 (U)
9/1/2021	0.444 (U)	
9/3/2021		0.622 (U)
Mean	0.6233	0.8101
Std. Dev.	0.25	0.4439
Upper Lim.	0.7697	1.07
Lower Lim.	0.4768	0.5501

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-4	YGWC-23S	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/7/2016		<0.1				
7/28/2016		0.03 (J)				
8/30/2016					0.02 (J)	
8/31/2016						0.12 (J)
9/20/2016		<0.1				
11/8/2016		<0.1				
11/16/2016					0.07 (J)	0.2 (J)
1/16/2017		<0.1				
2/24/2017						0.21 (J)
2/27/2017					0.06 (J)	
3/9/2017		<0.1				
5/2/2017		<0.1				
5/10/2017					<0.1	0.04 (J)
7/10/2017		<0.1				
7/11/2017					<0.1	0.2 (J)
10/11/2017		<0.1				
10/12/2017			<0.1	<0.1	<0.1	0.1 (J)
11/20/2017			0.2 (J)			
11/21/2017				<0.1		
1/11/2018				<0.1		
1/12/2018			0.21 (J)			
2/19/2018				<0.1		
2/20/2018			<0.1			
3/30/2018		<0.1				
4/3/2018			0.41	<0.1		
4/4/2018					<0.1	<0.1
6/12/2018		<0.1				
6/27/2018				<0.1		
6/28/2018			0.43			
8/7/2018			<0.1	0.11 (J)		
9/20/2018					0.041 (J)	<0.1
9/24/2018			0.034 (J)	<0.1		
9/27/2018		<0.1				
3/6/2019		<0.1				
3/27/2019			0.24 (J)		<0.1	
3/28/2019				0.1 (J)		0.078 (J)
4/4/2019		0.049 (J)				
8/21/2019						0.062 (J)
8/22/2019			<0.1	<0.1	<0.1	
9/27/2019		0.12 (J)				
10/9/2019			<0.1	<0.1	<0.1	<0.1
3/25/2020			<0.1	<0.1	<0.1	0.073 (J)
3/26/2020		<0.1				
9/23/2020	<0.1					
9/24/2020		<0.1			<0.1	
9/25/2020			<0.1	<0.1		<0.1
2/9/2021	0.14	<0.1	<0.1			0.058 (J)
2/10/2021				<0.1	<0.1	
3/3/2021	0.14					
3/4/2021		<0.1	<0.1	<0.1	<0.1	0.063 (J)
8/25/2021	<0.1	<0.1			<0.1	
8/26/2021			<0.1	<0.1		

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-4	YGWC-23S	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/27/2021						0.1
Mean	0.12	0.09495	0.1578	0.1006	0.08694	0.1065
Std. Dev.	0.02309	0.01972	0.1148	0.0025	0.02537	0.05242
Upper Lim.	0.14	0.12	0.24	0.11	0.1	0.1096
Lower Lim.	0.1	0.049	0.034	0.1	0.06	0.05787

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-49	PZ-37	YGWC-24SA	YGWC-36A
6/8/2016			<0.1	
8/1/2016			<0.1	
9/1/2016	0.09 (J)			
9/2/2016				0.05 (J)
9/20/2016			<0.1	
11/8/2016			<0.1	
11/14/2016				0.18 (J)
11/15/2016	0.16 (J)			
1/17/2017			<0.1	
2/27/2017	0.06 (J)			
2/28/2017				0.09 (J)
3/8/2017			<0.1	
5/2/2017			<0.1	
5/9/2017	0.05 (J)			0.009 (J)
7/7/2017			<0.1	
7/13/2017	<0.1			<0.1
9/22/2017				0.09 (J)
9/29/2017				<0.1
10/5/2017			<0.1	
10/6/2017				<0.1
10/11/2017	0.14 (J)			<0.1
10/12/2017		<0.1		
11/21/2017		0.26 (J)		
1/11/2018		<0.1		
2/20/2018		0.45		
3/30/2018			<0.1	<0.1
4/3/2018		0.31		
4/4/2018	<0.1			
6/12/2018			<0.1	
6/13/2018				<0.1
6/29/2018		<0.1		
8/6/2018		0.23 (J)		
9/20/2018	<0.1			
9/24/2018		<0.1		
9/26/2018			<0.1	<0.1
3/5/2019			<0.1	
3/6/2019				<0.1
3/28/2019	<0.1			
4/4/2019			0.033 (J)	0.043 (J)
9/26/2019	0.09 (J)		0.098 (J)	0.094 (J)
3/25/2020	<0.1			<0.1
3/26/2020			<0.1	
9/23/2020			<0.1	
9/24/2020	<0.1			
9/25/2020		<0.1		
10/7/2020				<0.1
2/9/2021	<0.1	<0.1	<0.1	
2/10/2021				<0.1
3/3/2021			<0.1	
3/4/2021	<0.1	<0.1		<0.1
8/25/2021		<0.1		
9/1/2021	<0.1		<0.1	

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-49	PZ-37	YGWC-24SA	YGWC-36A
9/3/2021				<0.1
Mean	0.09933	0.1708	0.09655	0.0928
Std. Dev.	0.02604	0.1163	0.01496	0.03214
Upper Lim.	0.14	0.31	0.1	0.1
Lower Lim.	0.09	0.1	0.098	0.09

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-23S	YGWC-38
6/7/2016					0.00044 (J)	
7/28/2016					<0.001	
9/20/2016					<0.001	
11/8/2016					<0.001	
1/16/2017					<0.001	
3/9/2017					<0.001	
5/2/2017					<0.001	
7/10/2017					<0.001	
10/12/2017						0.0001 (J)
11/20/2017						0.0001 (J)
1/12/2018						0.0001 (J)
2/20/2018						<0.001
3/30/2018					<0.001	
4/3/2018						<0.001
6/28/2018						<0.001
8/7/2018						<0.001
9/24/2018						<0.001
3/6/2019					<0.001	
4/4/2019					<0.001	
8/22/2019						<0.001
9/26/2019	<0.001					
9/27/2019					0.00013 (J)	
10/9/2019						<0.001
3/25/2020	<0.001					<0.001
3/26/2020					<0.001	
9/23/2020		<0.001	0.00028 (J)			
9/24/2020	<0.001			0.00011 (J)	4.6E-05 (J)	
9/25/2020						<0.001
2/9/2021	0.00019 (J)	0.00011 (J)	0.00054 (J)	7.3E-05 (J)	<0.001	<0.001
3/3/2021	<0.001	8E-05 (J)	9.6E-05 (J)			
3/4/2021				4.1E-05 (J)	0.00021 (J)	<0.001
8/25/2021			<0.001		<0.001	
8/26/2021				<0.001		<0.001
9/1/2021	<0.001	<0.001				
Mean	0.000865	0.0005475	0.000479	0.000306	0.0008133	0.00082
Std. Dev.	0.0003307	0.0005226	0.0003922	0.0004635	0.0003546	0.0003726
Upper Lim.	0.001	0.001	0.0007189	0.0001563	0.001	0.001
Lower Lim.	0.00019	8E-05	-0.0001082	2.421E-05	0.00044	0.0001

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-41	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37
8/30/2016		<0.001				
8/31/2016			<0.001			
9/1/2016				<0.001		
11/15/2016				<0.001		
11/16/2016		0.0002 (J)	<0.001			
2/24/2017			<0.001			
2/27/2017		<0.001		<0.001		
5/9/2017				<0.001		
5/10/2017		9E-05 (J)	8E-05 (J)			
7/11/2017		<0.001	<0.001			
7/13/2017				<0.001		
10/11/2017				<0.001		
10/12/2017	<0.001	<0.001	<0.001			0.0002 (J)
11/21/2017	<0.001					0.0002 (J)
1/11/2018	7E-05 (J)					0.0001 (J)
2/19/2018	<0.001					
2/20/2018						<0.001
4/3/2018	<0.001					<0.001
4/4/2018		<0.001	<0.001	<0.001		
6/27/2018	0.0011 (J)					
6/29/2018						<0.001
8/6/2018						<0.001
8/7/2018	<0.001					
9/20/2018		<0.001	<0.001	<0.001		
9/24/2018	<0.001					<0.001
8/21/2019			<0.001			
8/22/2019	6.7E-05 (J)	<0.001				
9/26/2019				<0.001	<0.001	
10/9/2019	0.00012 (J)	<0.001	<0.001			
3/25/2020	<0.001	4.7E-05 (J)	7.5E-05 (J)	5.9E-05 (J)	<0.001	
9/24/2020		<0.001		<0.001	<0.001	
9/25/2020	<0.001		<0.001			8.5E-05 (J)
2/9/2021			<0.001	<0.001		8.8E-05 (J)
2/10/2021	0.0002 (J)	5.4E-05 (J)			8.7E-05 (J)	
3/4/2021	<0.001	<0.001	<0.001	<0.001	0.00015 (J)	<0.001
8/25/2021		<0.001				<0.001
8/26/2021	<0.001					
9/1/2021				<0.001	<0.001	
9/27/2021			<0.001			
Mean	0.0007705	0.0007594	0.000877	0.0009328	0.0007062	0.0006394
Std. Dev.	0.0004114	0.0004143	0.0003246	0.0002515	0.0004556	0.0004471
Upper Lim.	0.0011	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00012	9E-05	8E-05	5.9E-05	8.7E-05	8.8E-05

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-24SA	YGWC-36A
6/8/2016	<0.001	
8/1/2016	<0.001	
9/2/2016		0.0017 (J)
9/20/2016	<0.001	
11/8/2016	<0.001	
11/14/2016		0.0002 (J)
1/17/2017	<0.001	
2/28/2017		0.0003 (J)
3/8/2017	<0.001	
5/2/2017	<0.001	
5/9/2017		0.0004 (J)
7/7/2017	<0.001	
7/13/2017		0.0004 (J)
9/22/2017		0.0003 (J)
9/29/2017		0.0002 (J)
10/6/2017		0.0002 (J)
3/30/2018	<0.001	<0.001
3/5/2019	<0.001	
3/6/2019		<0.001
4/4/2019	<0.001	0.00037 (J)
9/26/2019	<0.001	0.00023 (J)
3/25/2020		0.0001 (J)
3/26/2020	5.3E-05 (J)	
9/23/2020	<0.001	
10/7/2020		0.00077 (J)
2/9/2021	0.00036 (J)	
2/10/2021		0.00051 (J)
3/3/2021	<0.001	
3/4/2021		0.00025 (J)
9/1/2021	<0.001	
9/3/2021		<0.001
Mean	0.0009066	0.0005253
Std. Dev.	0.0002691	0.0004283
Upper Lim.	0.001	0.0005018
Lower Lim.	0.00036	0.0001591

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.03		
7/28/2016				0.0019 (J)		
9/20/2016				0.0021 (J)		
11/8/2016				0.0024 (J)		
1/16/2017				0.0022 (J)		
3/9/2017				0.0025 (J)		
5/2/2017				0.0019 (J)		
7/10/2017				0.0018 (J)		
10/12/2017					0.0095 (J)	0.004 (J)
11/20/2017					0.0083 (J)	
11/21/2017						0.0043 (J)
1/11/2018						0.0044 (J)
1/12/2018					0.0089 (J)	
2/19/2018						<0.03
2/20/2018					0.0082 (J)	
3/30/2018				0.0039 (J)		
4/3/2018					0.0097 (J)	0.0047 (J)
6/12/2018				0.0017 (J)		
6/27/2018						0.0042 (J)
6/28/2018					0.0093 (J)	
8/7/2018					0.0092 (J)	0.0038 (J)
9/24/2018					0.0083 (J)	0.0037 (J)
9/27/2018				0.0017 (J)		
10/16/2018	0.0052 (J)					
3/6/2019				0.0025 (J)		
4/4/2019				0.0018 (J)		
8/22/2019					0.0082 (J)	0.0035 (J)
9/26/2019	<0.03					
9/27/2019				0.0017 (J)		
10/9/2019					0.0081 (J)	0.0032 (J)
3/25/2020	0.0011 (J)				0.0081 (J)	0.0029 (J)
3/26/2020				0.0021 (J)		
9/23/2020		0.03 (J)				
9/24/2020	0.011 (J)		0.013 (J)	0.0035 (J)		
9/25/2020					0.0069 (J)	0.0025 (J)
2/9/2021	0.021 (J)	0.018 (J)	0.016 (J)	0.0026 (J)	0.0067 (J)	
2/10/2021						0.0021 (J)
3/3/2021	0.022 (J)	0.02 (J)				
3/4/2021			0.016 (J)	0.0026 (J)	0.0067 (J)	0.0021 (J)
8/25/2021		0.033		0.0026 (J)		
8/26/2021			0.015 (J)		0.007 (J)	0.0021 (J)
9/1/2021	0.013 (J)					
Mean	0.01261	0.02525	0.015	0.002974	0.008207	0.004167
Std. Dev.	0.007686	0.007365	0.001414	0.002972	0.001011	0.003124
Upper Lim.	0.02174	0.04197	0.01821	0.0026	0.008892	0.0044
Lower Lim.	0.003485	0.008528	0.01179	0.0018	0.007522	0.0021

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-36A
8/30/2016	0.0257 (J)					
8/31/2016		0.006 (J)				
9/1/2016			0.0034 (J)			
9/2/2016						0.0029 (J)
11/14/2016						0.0044 (J)
11/15/2016			0.0044 (J)			
11/16/2016	0.0221 (J)	0.0095 (J)				
2/24/2017		0.0104 (J)				
2/27/2017	0.0208 (J)		0.0036 (J)			
2/28/2017						0.0038 (J)
5/9/2017			0.0038 (J)			0.0057 (J)
5/10/2017	0.0316 (J)	0.0123 (J)				
7/11/2017	0.0281 (J)	0.0131 (J)				
7/13/2017			0.0036 (J)			0.007 (J)
9/22/2017						0.0067 (J)
9/29/2017						0.0064 (J)
10/6/2017						0.0065 (J)
10/11/2017			0.0036 (J)			
10/12/2017	0.0331 (J)	0.013 (J)			0.0271 (J)	
11/21/2017					0.0255 (J)	
1/11/2018					0.0271 (J)	
2/20/2018					<0.03	
3/30/2018						0.0061 (J)
4/3/2018					0.027 (J)	
4/4/2018	0.037 (J)	0.016 (J)	0.0039 (J)			
6/13/2018						0.0065 (J)
6/29/2018					0.032 (J)	
8/6/2018					0.033 (J)	
9/20/2018	0.049 (J)	0.019 (J)	0.0036 (J)			
9/24/2018					0.028 (J)	
9/26/2018						0.0063 (J)
10/16/2018				0.0011 (J)		
3/6/2019						0.0057 (J)
4/4/2019						0.0058 (J)
8/21/2019		0.015 (J)				
8/22/2019	0.047					
9/26/2019			0.0036 (J)	<0.03		0.0041 (J)
10/9/2019	0.037	0.018 (J)				
3/25/2020	0.045	0.016 (J)	0.0037 (J)	0.011 (J)		0.0032 (J)
9/24/2020	0.05		0.0037 (J)	0.001 (J)		
9/25/2020		0.018 (J)			0.028 (J)	
10/7/2020						0.0014 (J)
2/9/2021		0.024 (J)	0.0038 (J)		0.024 (J)	
2/10/2021	0.058			0.0012 (J)		0.0011 (J)
3/4/2021	0.059	0.025 (J)	0.0035 (J)	0.0015 (J)	0.028 (J)	<0.03
8/25/2021	0.053				0.023 (J)	
9/1/2021			0.0036 (J)	0.0019 (J)		
9/3/2021						0.00086 (J)
9/27/2021		0.0092 (J)				
Mean	0.03976	0.01497	0.0037	0.004671	0.02647	0.005235
Std. Dev.	0.01276	0.005331	0.0002386	0.005813	0.004592	0.003095
Upper Lim.	0.04841	0.01858	0.0039	0.015	0.03008	0.006697

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-36A
Lower Lim.	0.03111	0.01135	0.0035	0.001	0.02287	0.003217

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-23S	YGWC-38	YGWC-41	YGWC-42	YGWC-43	YGWC-49
6/7/2016	9.8E-05 (J)					
7/28/2016	<0.0002					
8/30/2016				<0.0002		
8/31/2016					<0.0002	
9/1/2016						<0.0002
9/20/2016	<0.0002					
11/8/2016	<0.0002					
11/15/2016						<0.0002
11/16/2016				<0.0002	<0.0002	
1/16/2017	<0.0002					
2/24/2017					<0.0002	
2/27/2017				<0.0002		<0.0002
3/9/2017	<0.0002					
5/2/2017	<0.0002					
5/9/2017						<0.0002
5/10/2017				<0.0002	<0.0002	
7/10/2017	<0.0002					
7/11/2017				<0.0002	<0.0002	
7/13/2017						<0.0002
10/11/2017						<0.0002
10/12/2017		<0.0002	<0.0002	<0.0002	<0.0002	
11/20/2017		8E-05 (J)				
11/21/2017			6E-05 (J)			
1/11/2018			<0.0002			
1/12/2018		<0.0002				
2/19/2018			<0.0002			
2/20/2018		<0.0002				
3/30/2018	<0.0002					
4/3/2018		<0.0002	<0.0002			
4/4/2018				<0.0002	<0.0002	<0.0002
6/27/2018			<0.0002			
6/28/2018		3.7E-05 (J)				
8/7/2018		<0.0002	<0.0002			
9/20/2018				4.8E-05 (J)	5.2E-05 (J)	6.1E-05 (J)
9/24/2018		<0.0002	<0.0002			
9/27/2018	<0.0002					
3/6/2019	<0.0002					
8/21/2019					<0.0002	
8/22/2019		<0.0002	<0.0002	<0.0002		
2/9/2021	0.00015 (J)	<0.0002			<0.0002	0.00014 (J)
2/10/2021			<0.0002	<0.0002		
3/4/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/25/2021	<0.0002			<0.0002		
8/26/2021		<0.0002	<0.0002			
9/1/2021						<0.0002
9/27/2021					9E-05 (JB)	
Mean	0.0001891	0.0001764	0.0001883	0.0001873	0.0001785	0.0001819
Std. Dev.	2.942E-05	5.584E-05	4.041E-05	4.388E-05	5.086E-05	4.396E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	0.00015	8E-05	6E-05	4.8E-05	9E-05	0.00014

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	PZ-37
10/12/2017	<0.0002
11/21/2017	6E-05 (J)
1/11/2018	<0.0002
2/20/2018	<0.0002
4/3/2018	<0.0002
6/29/2018	<0.0002
8/6/2018	<0.0002
9/24/2018	<0.0002
9/25/2020	<0.0002
2/9/2021	<0.0002
3/4/2021	<0.0002
8/25/2021	<0.0002
Mean	0.0001883
Std. Dev.	4.041E-05
Upper Lim.	0.0002
Lower Lim.	6E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YGWC-42	YGWC-43	YGWC-49	PZ-35
8/30/2016			0.0019 (J)			
8/31/2016				0.0022 (J)		
9/1/2016					<0.01	
11/15/2016					<0.01	
11/16/2016			0.0027 (J)	<0.01		
2/24/2017				<0.01		
2/27/2017			0.0031 (J)		0.0007 (J)	
5/9/2017					<0.01	
5/10/2017			0.0017 (J)	<0.01		
7/11/2017			0.0014 (J)	<0.01		
7/13/2017					<0.01	
10/11/2017					<0.01	
10/12/2017			<0.01	<0.01		
4/4/2018			<0.01	<0.01	<0.01	
9/20/2018			<0.01	<0.01	<0.01	
8/21/2019				0.0012 (J)		
8/22/2019			<0.01			
10/9/2019			<0.01	0.0012 (J)		
3/25/2020	<0.01		<0.01	0.0015 (J)	<0.01	0.0019 (J)
9/23/2020		0.0068 (J)				
9/24/2020	0.0022 (J)		0.00091 (J)		<0.01	<0.01
9/25/2020				0.0011 (J)		
2/9/2021	0.0038 (J)	0.0068 (J)		0.0012 (J)	<0.01	
2/10/2021			0.00094 (J)			<0.01
3/3/2021	0.0037 (J)	0.0049 (J)				
3/4/2021			0.00085 (J)	0.0011 (J)	<0.01	<0.01
8/25/2021		0.0081 (J)	0.00078 (J)			
9/1/2021	0.0014 (J)				<0.01	<0.01
9/27/2021				0.0062 (J)		
Mean	0.00422	0.00665	0.004952	0.005713	0.009285	0.00838
Std. Dev.	0.003387	0.001318	0.004314	0.004331	0.002579	0.003622
Upper Lim.	0.004477	0.009642	0.01	0.01	0.01	0.01
Lower Lim.	0.001073	0.003658	0.00091	0.0012	0.0007	0.0019

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	PZ-37	YGWC-36A
9/2/2016		0.0027 (J)
11/14/2016		0.0071 (J)
2/28/2017		0.0038 (J)
5/9/2017		0.0025 (J)
7/13/2017		0.0014 (J)
9/22/2017		<0.01
9/29/2017		<0.01
10/6/2017		<0.01
10/12/2017	0.0022 (J)	
11/21/2017	0.0016 (J)	
1/11/2018	0.0015 (J)	
2/20/2018	<0.01	
3/30/2018		<0.01
4/3/2018	<0.01	
6/29/2018	0.0021 (J)	
8/6/2018	<0.01	
9/24/2018	<0.01	
3/6/2019		<0.01
3/25/2020		<0.01
9/25/2020	0.0016 (J)	
10/7/2020		0.0015 (J)
2/9/2021	0.0016 (J)	
2/10/2021		<0.01
3/4/2021	0.0024 (J)	<0.01
8/25/2021	0.0011 (J)	
9/3/2021		<0.01
Mean	0.004508	0.007267
Std. Dev.	0.00407	0.003689
Upper Lim.	0.01	0.01
Lower Lim.	0.0015	0.0025

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				0.037		
7/28/2016				0.0385		
9/20/2016				0.0464		
11/8/2016				0.0521		
1/16/2017				0.0469		
3/9/2017				0.0437		
5/2/2017				0.0395		
7/10/2017				0.0386		
10/12/2017					0.265	0.0191
11/20/2017					0.246	
11/21/2017						0.0687
1/11/2018						0.069
1/12/2018					0.249	
2/19/2018						0.071
2/20/2018					0.253	
3/30/2018				0.028		
4/3/2018					0.23	0.067
6/12/2018				0.026		
6/27/2018						0.066
6/28/2018					0.23	
8/7/2018					0.2	0.061
9/24/2018					0.2	0.061
9/27/2018				0.023		
10/16/2018	0.0019 (J)					
3/6/2019				0.019		
4/4/2019				0.017		
8/22/2019					0.14	0.058
9/26/2019	<0.005					
9/27/2019				0.018		
10/9/2019					0.12	0.052
1/15/2020			0.045			
1/16/2020		0.0018 (J)				
3/25/2020	<0.005				0.099	0.057
3/26/2020				0.024		
9/23/2020		0.016				
9/24/2020	<0.005		0.026	0.031		
9/25/2020					0.076	0.046
2/9/2021	<0.005	<0.005	0.06	0.032	0.073	
2/10/2021						0.033
3/3/2021	<0.005	<0.005				
3/4/2021			0.061	0.037	0.076	0.037
8/25/2021		0.019		0.032		
8/26/2021			0.055		0.06	0.027
9/1/2021	0.0027 (J)					
Mean	0.004229	0.00936	0.0494	0.03314	0.1678	0.05285
Std. Dev.	0.001338	0.007619	0.01454	0.01034	0.07768	0.01667
Upper Lim.	0.005	0.02107	0.07376	0.0392	0.249	0.06415
Lower Lim.	0.0019	-0.004906	0.02504	0.02709	0.076	0.04156

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/19/2021 10:04 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-49	PZ-35	PZ-37	YGWC-36A
8/30/2016	0.0711				
9/1/2016		0.0086 (J)			
9/2/2016					0.0012 (J)
11/14/2016					<0.005
11/15/2016		0.0056 (J)			
11/16/2016	0.0313				
2/27/2017	0.0316	0.0098 (J)			
2/28/2017					0.0017 (J)
5/9/2017		0.0076 (J)			0.0018 (J)
5/10/2017	0.053				
7/11/2017	0.0697				
7/13/2017		0.0093 (J)			0.0031 (J)
9/22/2017					0.0024 (J)
9/29/2017					0.002 (J)
10/6/2017					<0.005
10/11/2017		0.0089 (J)			
10/12/2017	0.0594			0.234	
11/21/2017				0.225	
1/11/2018				0.168	
2/20/2018				0.315	
3/30/2018					<0.005
4/3/2018				0.28	
4/4/2018	0.055	<0.005			
6/13/2018					0.0024 (J)
6/29/2018				0.26	
8/6/2018				0.21	
9/20/2018	0.041	0.0081 (J)			
9/24/2018				0.33	
9/26/2018					0.0037 (J)
10/16/2018			<0.005		
3/6/2019					0.0033 (J)
4/4/2019					0.0029 (J)
8/22/2019	0.047				
9/26/2019		0.0077 (J)	<0.005		0.0019 (J)
10/9/2019	0.042				
3/25/2020	0.046	0.0085 (J)	<0.005		0.0024 (J)
9/24/2020	0.046	0.0091 (J)	<0.005		
9/25/2020				0.32	
10/7/2020					<0.005
2/9/2021		0.0079 (J)		0.28	
2/10/2021	0.043		<0.005		<0.005
3/4/2021	0.048	0.0058	<0.005	0.27	<0.005
8/25/2021	0.043			0.2	
9/1/2021		0.0066	0.0016 (J)		
9/3/2021					<0.005
Mean	0.04847	0.00775	0.004514	0.2577	0.003358
Std. Dev.	0.01164	0.001481	0.001285	0.05119	0.001411
Upper Lim.	0.05636	0.008799	0.005	0.2978	0.005
Lower Lim.	0.04059	0.006701	0.0016	0.2175	0.0019

FIGURE I.

State Confidence Intervals - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 9:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Lithium (mg/L)	**YGWC-42**	**0.04841**	**0.03111**	**0.03**	**Yes**	**15**	**0.03976**	**0.01276**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 9:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	YAMW-1	0.01261	0.0002101	0.006	No	6	0.006128	0.009301	50	Kaplan-Meier	ln(x)	0.01	Param.
Antimony (mg/L)	YAMW-4	0.001325	0.0003728	0.006	No	4	0.001343	0.001127	25	Kaplan-Meier	sqrt(x)	0.01	Param.
Antimony (mg/L)	YAMW-5	0.003	0.00033	0.006	No	4	0.002333	0.001335	75	Kaplan-Meier	No	0.0625	NP (NDs)
Antimony (mg/L)	YGWC-23S	0.003	0.00085	0.006	No	17	0.002568	0.0009666	82.35	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-38	0.003	0.00063	0.006	No	14	0.002361	0.001078	71.43	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-41	0.003	0.0014	0.006	No	14	0.002886	0.0004276	92.86	Kaplan-Meier	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-42	0.003	0.00053	0.006	No	14	0.002824	0.0006601	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-43	0.003	0.00031	0.006	No	14	0.002808	0.0007189	92.86	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-49	0.003	0.0011	0.006	No	14	0.002688	0.0008013	85.71	None	No	0.01	NP (NDs)
Antimony (mg/L)	PZ-35	0.003	0.00039	0.006	No	6	0.002565	0.001066	83.33	None	No	0.0155	NP (NDs)
Antimony (mg/L)	PZ-37	0.003	0.0014	0.006	No	12	0.002646	0.0008569	83.33	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-24SA	0.003	0.0009	0.006	No	17	0.002876	0.0005093	94.12	None	No	0.01	NP (NDs)
Antimony (mg/L)	YGWC-36A	0.0041	0.0014	0.006	No	17	0.0041	0.006318	47.06	None	No	0.01	NP (normality)
Arsenic (mg/L)	YAMW-4	0.005	0.00079	0.01	No	4	0.002947	0.002372	50	None	No	0.0625	NP (normality)
Arsenic (mg/L)	YAMW-5	0.001914	0.0006656	0.01	No	4	0.003112	0.002191	50	Kaplan-Meier	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-23S	0.005	0.0012	0.01	No	19	0.0048	0.0008718	94.74	Kaplan-Meier	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-38	0.00204	0.0007945	0.01	No	15	0.001651	0.001446	13.33	None	ln(x)	0.01	Param.
Arsenic (mg/L)	YGWC-41	0.005	0.00062	0.01	No	15	0.003021	0.002197	53.33	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-42	0.003008	0.001423	0.01	No	15	0.002291	0.001282	13.33	None	sqrt(x)	0.01	Param.
Arsenic (mg/L)	YGWC-43	0.005	0.00099	0.01	No	15	0.004147	0.001769	80	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-49	0.005	0.001	0.01	No	14	0.004104	0.001782	78.57	None	No	0.01	NP (NDs)
Arsenic (mg/L)	PZ-35	0.005	0.00069	0.01	No	7	0.003807	0.002039	71.43	None	No	0.008	NP (NDs)
Arsenic (mg/L)	PZ-37	0.005	0.0008	0.01	No	12	0.002412	0.001928	33.33	None	No	0.01	NP (normality)
Arsenic (mg/L)	YGWC-24SA	0.005	0.0015	0.01	No	19	0.004816	0.000803	94.74	None	No	0.01	NP (NDs)
Arsenic (mg/L)	YGWC-36A	0.005	0.00088	0.01	No	19	0.004092	0.001808	78.95	None	No	0.01	NP (NDs)
Barium (mg/L)	YAMW-1	0.06247	0.02668	2	No	7	0.04457	0.01506	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-2	0.01016	0.00639	2	No	4	0.008275	0.0008302	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-4	0.03323	-0.007731	2	No	4	0.01275	0.009021	0	None	No	0.01	Param.
Barium (mg/L)	YAMW-5	0.06468	0.02232	2	No	4	0.0435	0.009327	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-23S	0.04532	0.03006	2	No	19	0.03769	0.01303	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-38	0.02349	0.01804	2	No	15	0.02077	0.00402	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-41	0.0296	0.02029	2	No	15	0.02495	0.006866	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-42	0.04568	0.03134	2	No	15	0.03851	0.01058	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-43	0.0344	0.01678	2	No	15	0.02559	0.013	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-49	0.07922	0.06936	2	No	14	0.07429	0.006962	0	None	No	0.01	Param.
Barium (mg/L)	PZ-35	0.067	0.032	2	No	7	0.04386	0.01475	0	None	No	0.008	NP (normality)
Barium (mg/L)	PZ-37	0.05638	0.0398	2	No	12	0.04809	0.01057	0	None	No	0.01	Param.
Barium (mg/L)	YGWC-24SA	0.0203	0.0189	2	No	19	0.02076	0.00347	0	None	No	0.01	NP (normality)
Barium (mg/L)	YGWC-36A	0.04374	0.0322	2	No	19	0.03797	0.009852	0	None	No	0.01	Param.
Beryllium (mg/L)	YAMW-1	0.0005	0.000058	0.004	No	7	0.0003604	0.0002	57.14	None	No	0.008	NP (NDs)
Beryllium (mg/L)	YAMW-2	0.0005	0.000051	0.004	No	4	0.000279	0.0002553	50	None	No	0.0625	NP (normality)
Beryllium (mg/L)	YAMW-5	0.0001844	0.00007802	0.004	No	5	0.0001312	0.00003174	0	None	No	0.01	Param.
Beryllium (mg/L)	YGWC-23S	0.0005	0.000081	0.004	No	19	0.0002098	0.0001808	26.32	None	No	0.01	NP (normality)
Beryllium (mg/L)	**YGWC-38**	**0.005425**	**0.004108**	**0.004**	**Yes**	**15**	**0.004613**	**0.001149**	**0**	**None**	**x^3**	**0.01**	**Param.**
Beryllium (mg/L)	YGWC-41	0.0038	0.0015	0.004	No	15	0.00288	0.0009518	0	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-42	0.0005	0.00009	0.004	No	15	0.0003603	0.0002048	66.67	None	No	0.01	NP (NDs)
Beryllium (mg/L)	YGWC-43	0.00053	0.00029	0.004	No	15	0.00041	0.000147	40	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-49	0.00013	0.0001	0.004	No	14	0.0001393	0.0001047	7.143	None	No	0.01	NP (normality)
Beryllium (mg/L)	PZ-35	0.0004523	0.0002517	0.004	No	8	0.000395	0.0001122	25	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	PZ-37	0.0003866	0.0002088	0.004	No	12	0.0003567	0.0001256	16.67	Kaplan-Meier	No	0.01	Param.
Beryllium (mg/L)	YGWC-24SA	0.00016	0.0001	0.004	No	19	0.0001789	0.0001451	15.79	None	No	0.01	NP (normality)
Beryllium (mg/L)	YGWC-36A	0.000322	0.0001979	0.004	No	19	0.0002599	0.000106	5.263	None	No	0.01	Param.
Cadmium (mg/L)	YAMW-1	0.0005	0.00013	0.005	No	7	0.00031	0.0001806	42.86	None	No	0.008	NP (normality)
Cadmium (mg/L)	YAMW-5	0.0002803	0.0001297	0.005	No	4	0.000205	0.00003317	0	None	No	0.01	Param.

State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 9:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Cadmium (mg/L)	YGWC-23S	0.0005	0.00007	0.005	No	19	0.0004774	0.00009865	94.74	None	No	0.01	NP (NDs)
Cadmium (mg/L)	YGWC-38	0.0029	0.0014	0.005	No	15	0.002267	0.0006747	0	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-41	0.0005	0.00017	0.005	No	15	0.0003027	0.0001496	33.33	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-42	0.0006	0.0002	0.005	No	15	0.0003847	0.0001638	46.67	None	No	0.01	NP (normality)
Cadmium (mg/L)	YGWC-49	0.0005	0.00007	0.005	No	14	0.0004693	0.0001149	92.86	None	No	0.01	NP (NDs)
Cadmium (mg/L)	PZ-35	0.0005	0.00016	0.005	No	7	0.0004514	0.0001285	85.71	None	No	0.008	NP (NDs)
Cadmium (mg/L)	PZ-37	0.0006865	0.0002751	0.005	No	12	0.0005117	0.0002597	16.67	Kaplan-Meier	No	0.01	Param.
Cadmium (mg/L)	YGWC-36A	0.0005	0.00015	0.005	No	19	0.0002568	0.000153	26.32	None	No	0.01	NP (normality)
Chromium (mg/L)	YAMW-1	0.005	0.00058	0.1	No	5	0.001616	0.001898	20	None	No	0.031	NP (normality)
Chromium (mg/L)	YAMW-2	0.003819	-0.0008143	0.1	No	4	0.001503	0.00102	0	None	No	0.01	Param.
Chromium (mg/L)	YAMW-4	0.005	0.00057	0.1	No	4	0.003892	0.002215	75	None	No	0.0625	NP (NDs)
Chromium (mg/L)	YGWC-23S	0.005	0.0008	0.1	No	15	0.003409	0.002034	60	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-38	0.005	0.00065	0.1	No	15	0.00441	0.001557	86.67	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-41	0.005	0.00039	0.1	No	15	0.004693	0.00119	93.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-42	0.005	0.0013	0.1	No	15	0.004155	0.001757	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-43	0.005	0.00071	0.1	No	15	0.003838	0.001995	73.33	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-49	0.002	0.0014	0.1	No	13	0.001962	0.0009421	7.692	None	No	0.01	NP (normality)
Chromium (mg/L)	PZ-35	0.005	0.0006	0.1	No	5	0.001622	0.001904	20	None	No	0.031	NP (normality)
Chromium (mg/L)	PZ-37	0.005	0.0017	0.1	No	12	0.004133	0.001581	75	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-24SA	0.005	0.0011	0.1	No	15	0.004209	0.001637	80	None	No	0.01	NP (NDs)
Chromium (mg/L)	YGWC-36A	0.005	0.0013	0.1	No	15	0.004099	0.001656	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YAMW-1	0.02746	0.006788	0.035	No	8	0.01712	0.01043	25	Kaplan-Meier	No	0.01	Param.
Cobalt (mg/L)	YAMW-2	0.0025	0.00082	0.035	No	4	0.001313	0.0007951	0	None	No	0.0625	NP (normality)
Cobalt (mg/L)	YAMW-4	0.001222	0.00005821	0.035	No	4	0.00064	0.0002563	0	None	No	0.01	Param.
Cobalt (mg/L)	YAMW-5	0.005	0.00077	0.035	No	4	0.003942	0.002115	75	None	No	0.0625	NP (NDs)
Cobalt (mg/L)	YGWC-41	0.005	0.00069	0.035	No	15	0.003826	0.002023	73.33	None	No	0.01	NP (NDs)
Cobalt (mg/L)	YGWC-42	0.0025	0.0017	0.035	No	15	0.002147	0.0008847	6.667	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-43	0.005	0.0016	0.035	No	15	0.003367	0.001688	46.67	None	No	0.01	NP (normality)
Cobalt (mg/L)	YGWC-49	0.005	0.0006	0.035	No	14	0.00375	0.002052	71.43	None	No	0.01	NP (NDs)
Cobalt (mg/L)	PZ-35	0.0059	0.005	0.035	No	7	0.005129	0.0003402	85.71	None	No	0.008	NP (NDs)
Cobalt (mg/L)	PZ-37	0.01233	0.0046	0.035	No	12	0.008467	0.004928	0	None	No	0.01	Param.
Cobalt (mg/L)	YGWC-36A	0.005	0.0006	0.035	No	19	0.003826	0.00202	73.68	None	No	0.01	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	YAMW-1	0.818	0.307	6.92	No	6	0.5625	0.186	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-2	1.123	-0.1743	6.92	No	4	0.4743	0.2857	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-4	1.882	-0.368	6.92	No	4	0.757	0.4955	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YAMW-5	1.811	0.1501	6.92	No	4	0.9805	0.3658	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-23S	0.7995	0.3742	6.92	No	19	0.5869	0.3632	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-38	1.275	0.578	6.92	No	15	0.9263	0.514	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-41	1.309	0.593	6.92	No	15	0.9873	0.5741	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-42	2.827	1.242	6.92	No	15	2.034	1.17	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-43	3.631	1.305	6.92	No	15	2.619	1.878	0	None	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-49	1.137	0.4963	6.92	No	14	0.8166	0.4522	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-35	0.968	0.1216	6.92	No	6	0.5448	0.3081	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	PZ-37	1.982	1.431	6.92	No	12	1.721	0.4054	0	None	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-24SA	0.7697	0.4768	6.92	No	19	0.6233	0.25	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	YGWC-36A	1.07	0.5501	6.92	No	19	0.8101	0.4439	0	None	No	0.01	Param.
Fluoride (mg/L)	YAMW-4	0.14	0.1	4	No	4	0.12	0.02309	50	None	No	0.0625	NP (normality)
Fluoride (mg/L)	YGWC-23S	0.12	0.049	4	No	20	0.09495	0.01972	85	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-38	0.24	0.034	4	No	16	0.1578	0.1148	62.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-41	0.11	0.1	4	No	16	0.1006	0.0025	87.5	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-42	0.1	0.06	4	No	16	0.08694	0.02537	75	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-43	0.1096	0.05787	4	No	16	0.1065	0.05242	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Fluoride (mg/L)	YGWC-49	0.14	0.09	4	No	15	0.09933	0.02604	60	None	No	0.01	NP (NDs)
Fluoride (mg/L)	PZ-37	0.31	0.1	4	No	12	0.1708	0.1163	66.67	None	No	0.01	NP (NDs)

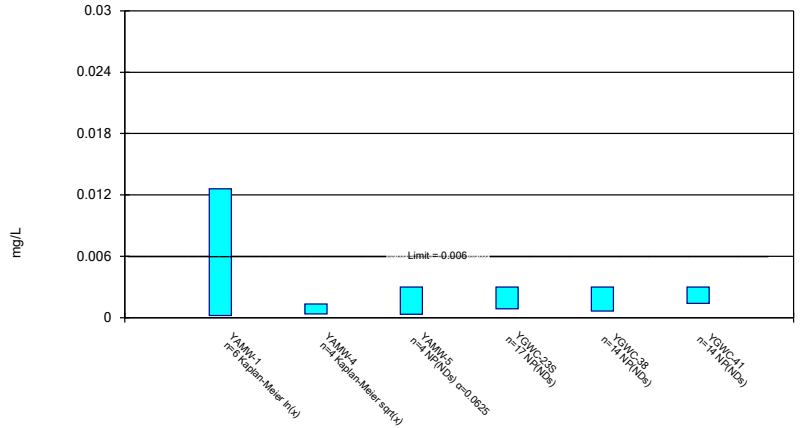
State Confidence Intervals - All Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 11/19/2021, 9:56 AM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	YGWC-24SA	0.1	0.098	4	No	20	0.09655	0.01496	90	None	No	0.01	NP (NDs)
Fluoride (mg/L)	YGWC-36A	0.1	0.09	4	No	20	0.0928	0.03214	65	None	No	0.01	NP (NDs)
Lead (mg/L)	YAMW-1	0.001	0.00019	0.0013	No	6	0.000865	0.0003307	83.33	None	No	0.0155	NP (NDs)
Lead (mg/L)	YAMW-2	0.001	0.00008	0.0013	No	4	0.0005475	0.0005226	50	None	No	0.0625	NP (normality)
Lead (mg/L)	YAMW-4	0.0007189	-0.0001082	0.0013	No	4	0.000479	0.0003922	25	Kaplan-Meier	No	0.01	Param.
Lead (mg/L)	YAMW-5	0.0001563	0.00002421	0.0013	No	4	0.000306	0.0004635	25	Kaplan-Meier	x^(1/3)	0.01	Param.
Lead (mg/L)	YGWC-23S	0.001	0.00044	0.0013	No	17	0.0008133	0.0003546	76.47	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-38	0.001	0.0001	0.0013	No	15	0.00082	0.0003726	80	Kaplan-Meier	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-41	0.0011	0.00012	0.0013	No	15	0.0007705	0.0004114	66.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-42	0.001	0.00009	0.0013	No	15	0.0007594	0.0004143	73.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-43	0.001	0.00008	0.0013	No	15	0.000877	0.0003246	86.67	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-49	0.001	0.000059	0.0013	No	14	0.0009328	0.0002515	92.86	None	No	0.01	NP (NDs)
Lead (mg/L)	PZ-35	0.001	0.000087	0.0013	No	6	0.0007062	0.0004556	66.67	None	No	0.0155	NP (NDs)
Lead (mg/L)	PZ-37	0.001	0.000088	0.0013	No	12	0.0006394	0.0004471	58.33	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-24SA	0.001	0.00036	0.0013	No	17	0.0009066	0.0002691	88.24	None	No	0.01	NP (NDs)
Lead (mg/L)	YGWC-36A	0.0005018	0.0001591	0.0013	No	17	0.0005253	0.0004283	17.65	Kaplan-Meier	sqrt(x)	0.01	Param.
Lithium (mg/L)	YAMW-1	0.02174	0.003485	0.03	No	7	0.01261	0.007686	14.29	None	No	0.01	Param.
Lithium (mg/L)	YAMW-4	0.04197	0.008528	0.03	No	4	0.02525	0.007365	0	None	No	0.01	Param.
Lithium (mg/L)	YAMW-5	0.01821	0.01179	0.03	No	4	0.015	0.001414	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-23S	0.0026	0.0018	0.03	No	19	0.002974	0.002972	5.263	None	No	0.01	NP (normality)
Lithium (mg/L)	YGWC-38	0.008892	0.007522	0.03	No	15	0.008207	0.001011	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-41	0.0044	0.0021	0.03	No	15	0.004167	0.003124	6.667	None	No	0.01	NP (normality)
Lithium (mg/L)	**YGWC-42**	**0.04841**	**0.03111**	**0.03**	**Yes**	**15**	**0.03976**	**0.01276**	**0**	**None**	**No**	**0.01**	**Param.**
Lithium (mg/L)	YGWC-43	0.01858	0.01135	0.03	No	15	0.01497	0.005331	0	None	No	0.01	Param.
Lithium (mg/L)	YGWC-49	0.0039	0.0035	0.03	No	14	0.0037	0.0002386	0	None	No	0.01	NP (normality)
Lithium (mg/L)	PZ-35	0.015	0.001	0.03	No	7	0.004671	0.005813	14.29	None	No	0.008	NP (normality)
Lithium (mg/L)	PZ-37	0.03008	0.02287	0.03	No	12	0.02647	0.004592	8.333	None	No	0.01	Param.
Lithium (mg/L)	YGWC-36A	0.006697	0.003217	0.03	No	19	0.005235	0.003095	5.263	None	sqrt(x)	0.01	Param.
Mercury (mg/L)	YGWC-23S	0.0002	0.00015	0.002	No	14	0.0001891	0.00002942	85.71	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-38	0.0002	0.00008	0.002	No	12	0.0001764	0.00005584	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-41	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-42	0.0002	0.000048	0.002	No	12	0.0001873	0.00004388	91.67	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-43	0.0002	0.00009	0.002	No	12	0.0001785	0.00005086	83.33	None	No	0.01	NP (NDs)
Mercury (mg/L)	YGWC-49	0.0002	0.00014	0.002	No	11	0.0001819	0.00004396	81.82	None	No	0.006	NP (NDs)
Mercury (mg/L)	PZ-37	0.0002	0.00006	0.002	No	12	0.0001883	0.00004041	91.67	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	YAMW-1	0.004477	0.001073	0.014	No	5	0.00422	0.003387	20	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	YAMW-4	0.009642	0.003658	0.014	No	4	0.00665	0.001318	0	None	No	0.01	Param.
Molybdenum (mg/L)	YGWC-42	0.01	0.00091	0.014	No	15	0.004952	0.004314	40	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-43	0.01	0.0012	0.014	No	15	0.005713	0.004331	46.67	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-49	0.01	0.0007	0.014	No	13	0.009285	0.002579	92.31	None	No	0.01	NP (NDs)
Molybdenum (mg/L)	PZ-35	0.01	0.0019	0.014	No	5	0.00838	0.003622	80	None	No	0.031	NP (NDs)
Molybdenum (mg/L)	PZ-37	0.01	0.0015	0.014	No	12	0.004508	0.00407	33.33	None	No	0.01	NP (normality)
Molybdenum (mg/L)	YGWC-36A	0.01	0.0025	0.014	No	15	0.007267	0.003689	60	None	No	0.01	NP (NDs)
Selenium (mg/L)	YAMW-1	0.005	0.0019	0.05	No	7	0.004229	0.001338	71.43	None	No	0.008	NP (NDs)
Selenium (mg/L)	YAMW-4	0.02107	-0.004906	0.05	No	5	0.00936	0.007619	40	Kaplan-Meier	No	0.01	Param.
Selenium (mg/L)	YAMW-5	0.07376	0.02504	0.05	No	5	0.0494	0.01454	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-23S	0.0392	0.02709	0.05	No	19	0.03314	0.01034	0	None	No	0.01	Param.
Selenium (mg/L)	**YGWC-38**	**0.249**	**0.076**	**0.05**	**Yes**	**15**	**0.1678**	**0.07768**	**0**	**None**	**No**	**0.01**	**NP (normality)**
Selenium (mg/L)	YGWC-41	0.06415	0.04156	0.05	No	15	0.05285	0.01667	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-42	0.05636	0.04059	0.05	No	15	0.04847	0.01164	0	None	No	0.01	Param.
Selenium (mg/L)	YGWC-49	0.008799	0.006701	0.05	No	14	0.00775	0.001481	7.143	None	No	0.01	Param.
Selenium (mg/L)	PZ-35	0.005	0.0016	0.05	No	7	0.004514	0.001285	85.71	None	No	0.008	NP (NDs)
Selenium (mg/L)	**PZ-37**	**0.2978**	**0.2175**	**0.05**	**Yes**	**12**	**0.2577**	**0.05119**	**0**	**None**	**No**	**0.01**	**Param.**
Selenium (mg/L)	YGWC-36A	0.005	0.0019	0.05	No	19	0.003358	0.001411	36.84	None	No	0.01	NP (normality)

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: Antimony Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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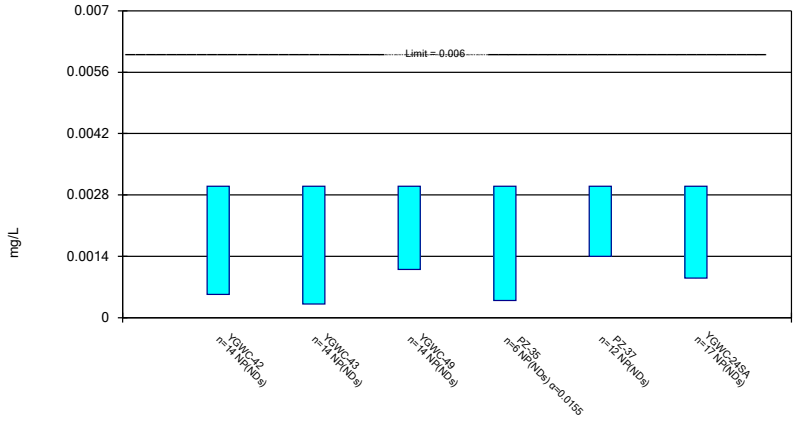
Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Antimony Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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Non-Parametric Confidence Interval

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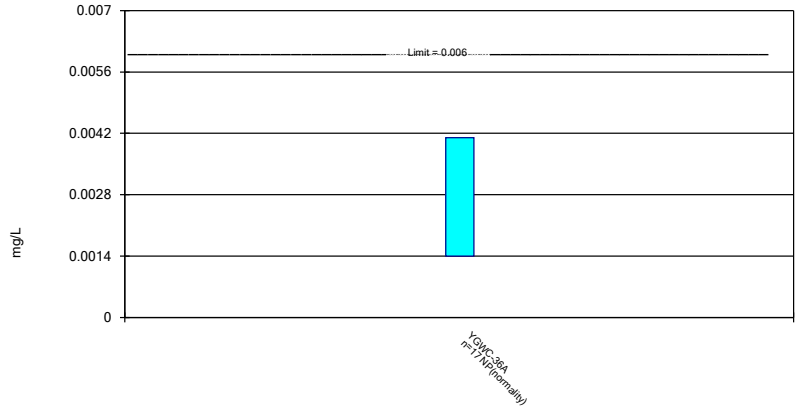

Constituent: Antimony Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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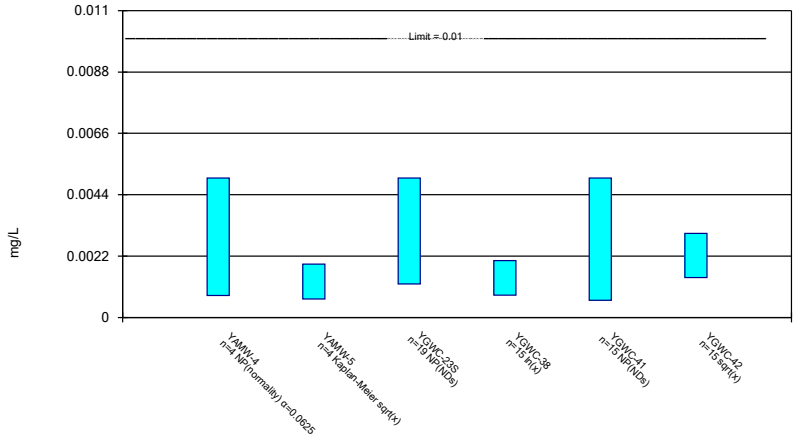
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

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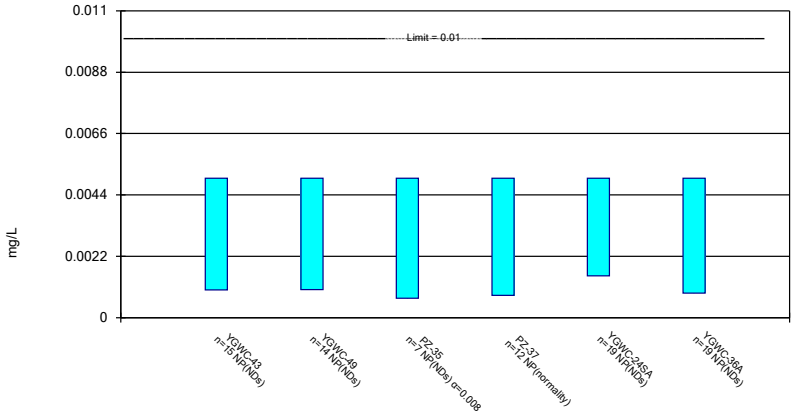

Constituent: Arsenic Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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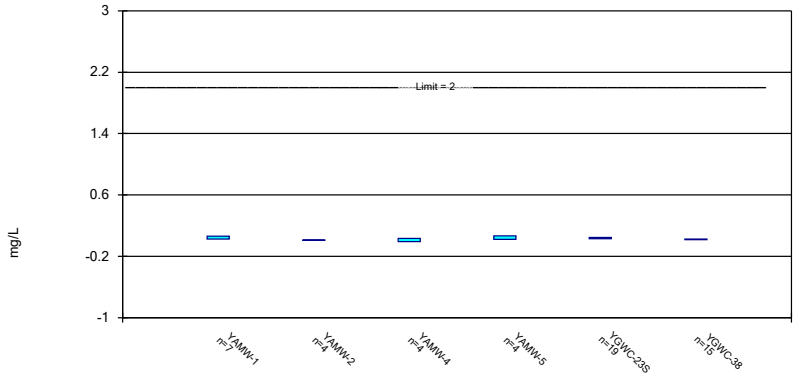
Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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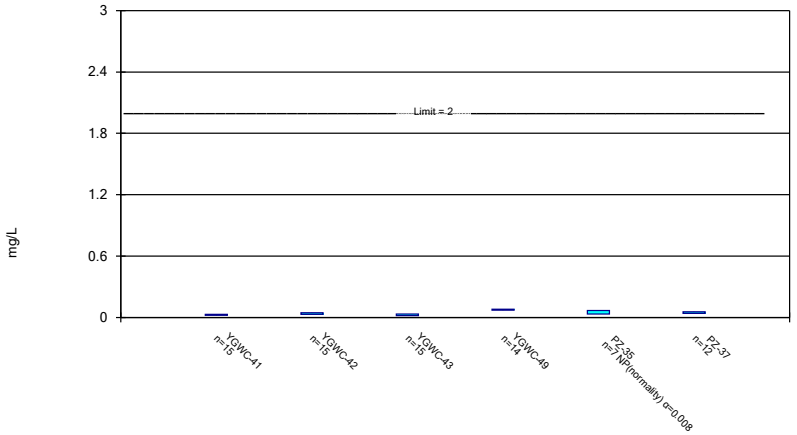
Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

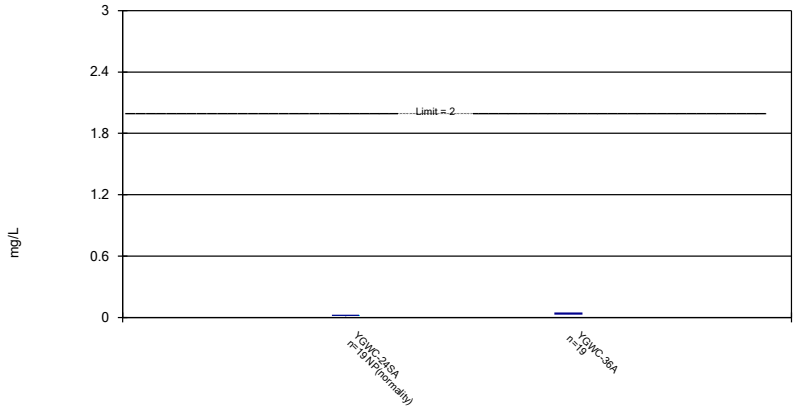


Constituent: Barium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

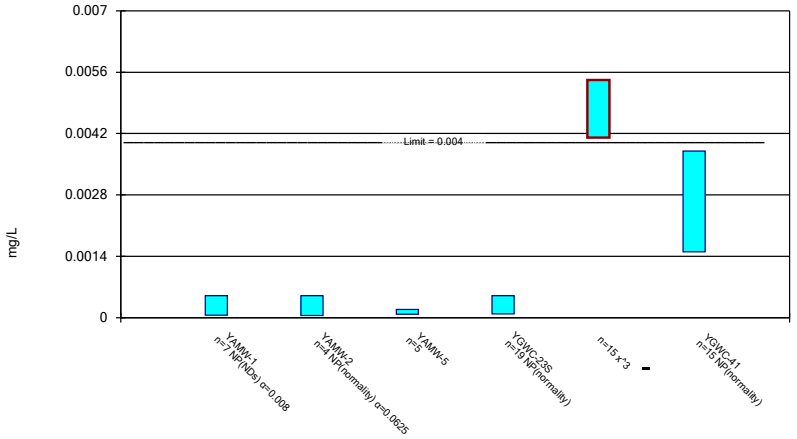
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

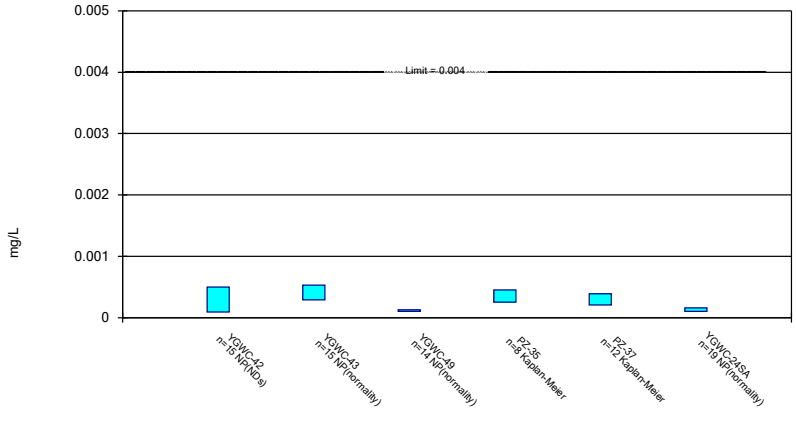


Constituent: Beryllium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric Confidence Interval

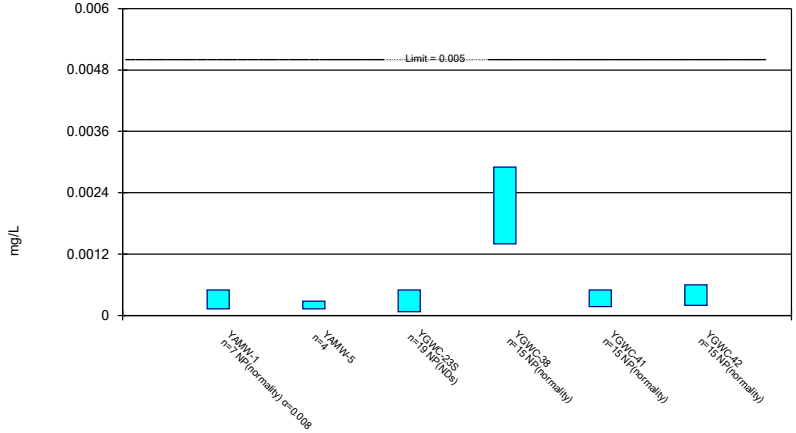
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

Constituent: Beryllium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

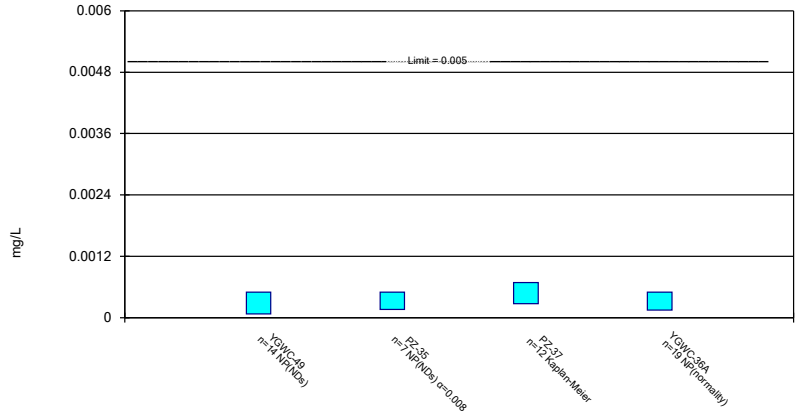
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

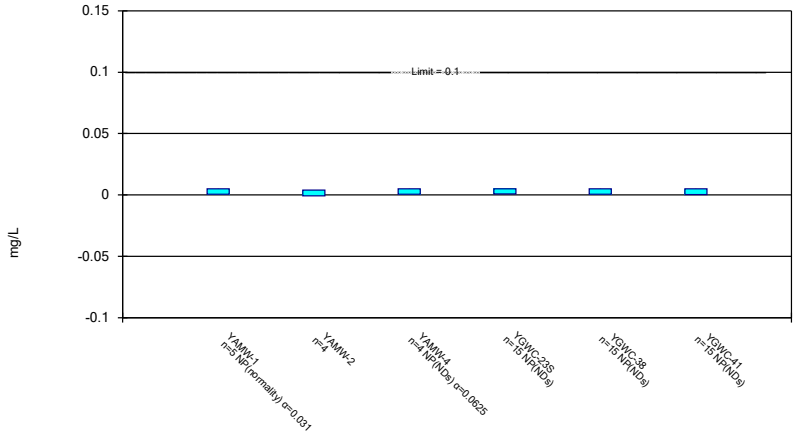
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

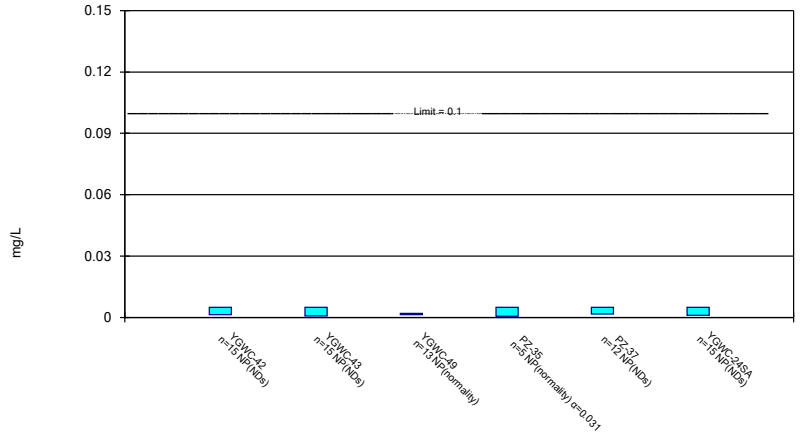
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Chromium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

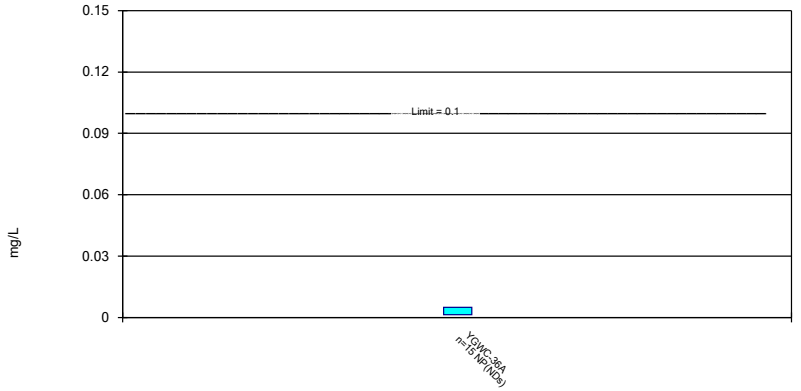
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.



Constituent: Chromium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

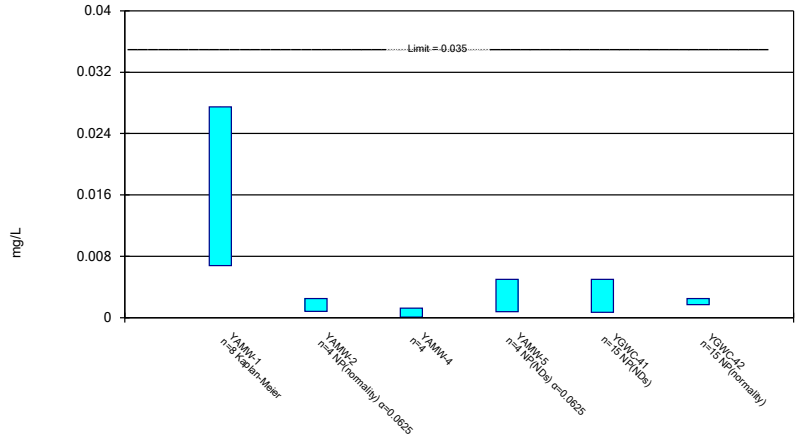
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Chromium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

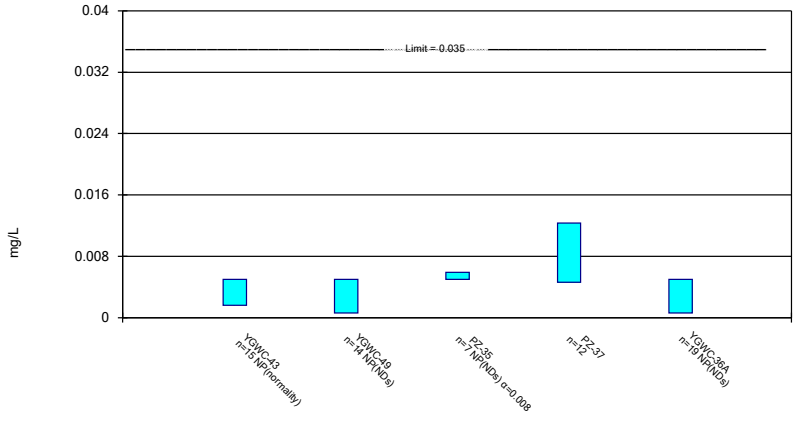


Constituent: Cobalt Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

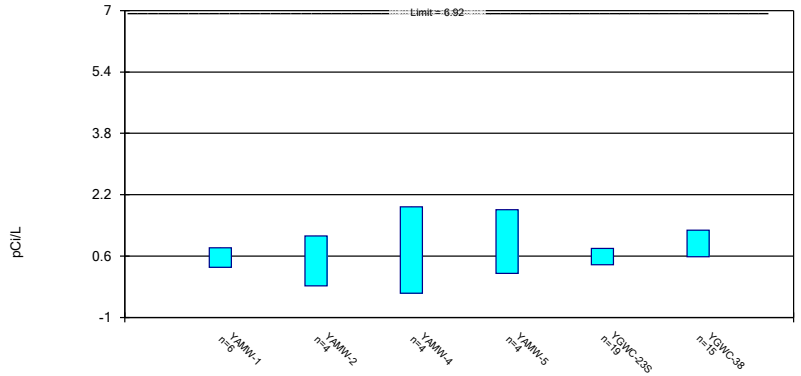


Constituent: Cobalt Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

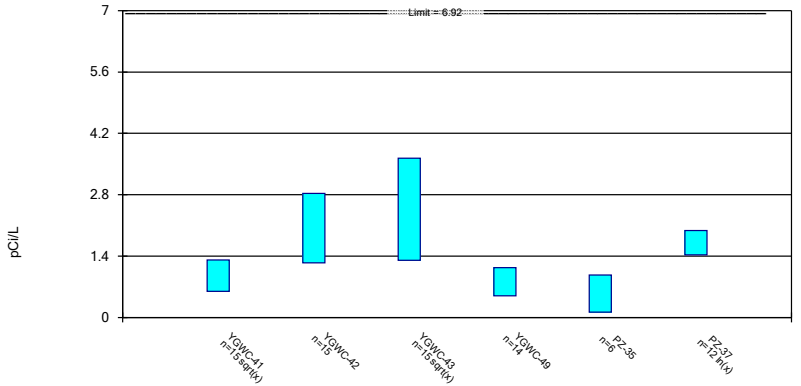


Constituent: Combined Radium 226 + 228 Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric Confidence Interval

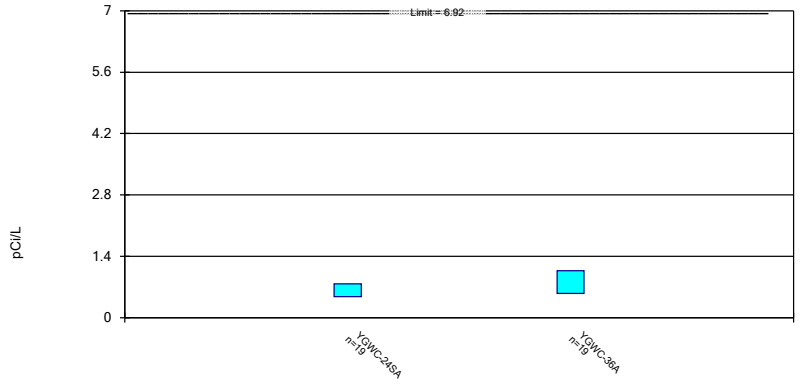
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric Confidence Interval

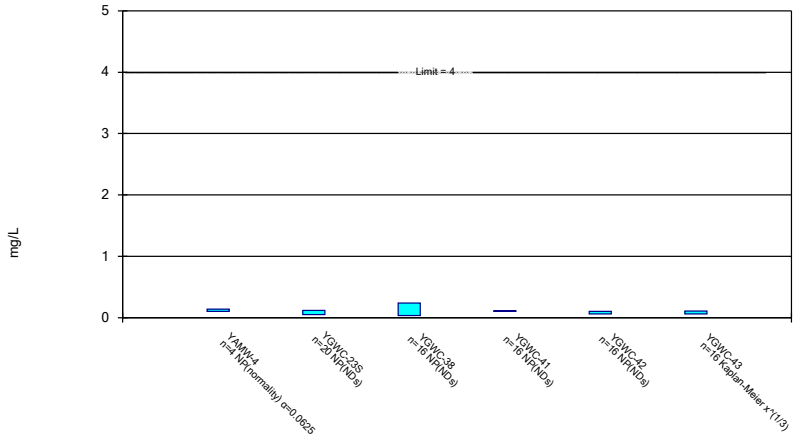
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

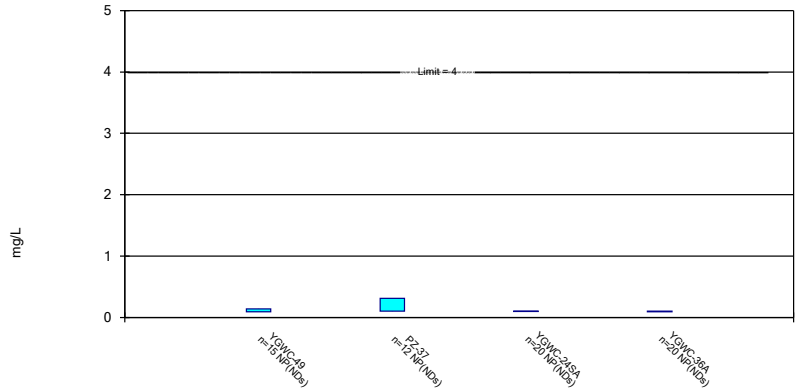
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

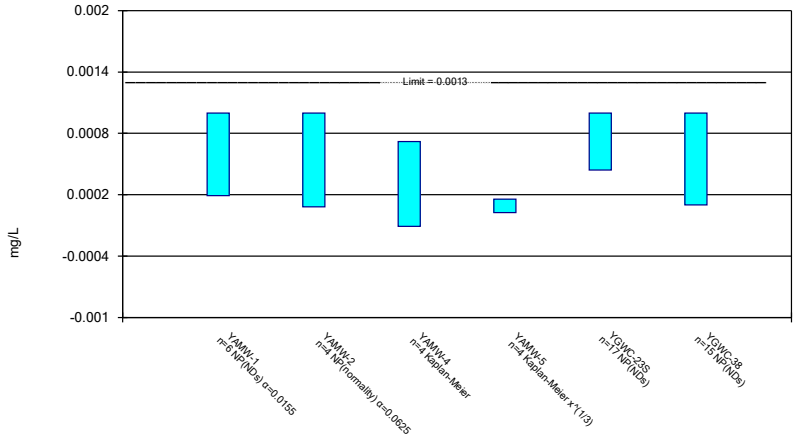
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Fluoride Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

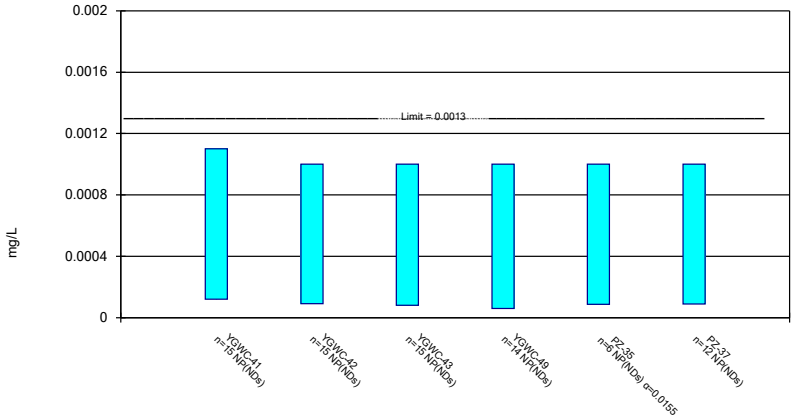
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lead Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

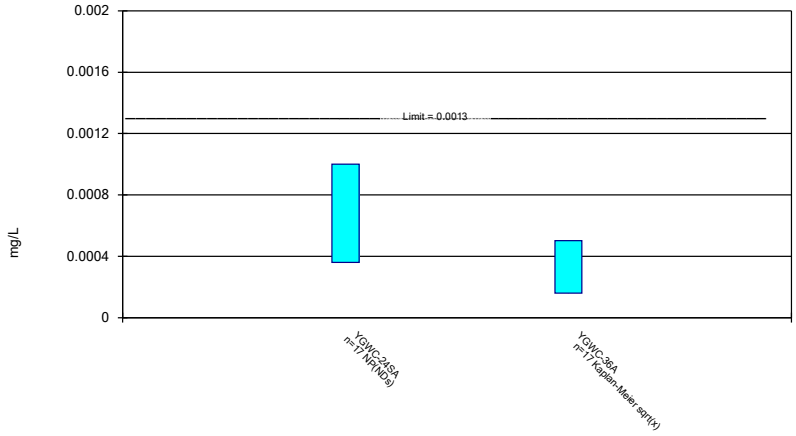


Constituent: Lead Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

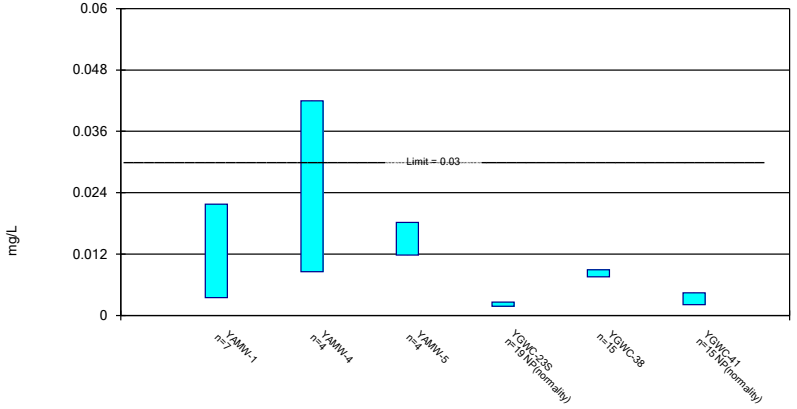


Constituent: Lead Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

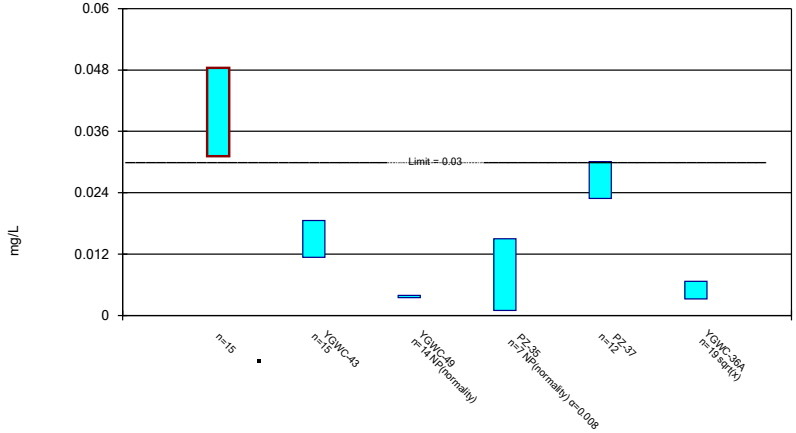


Constituent: Lithium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

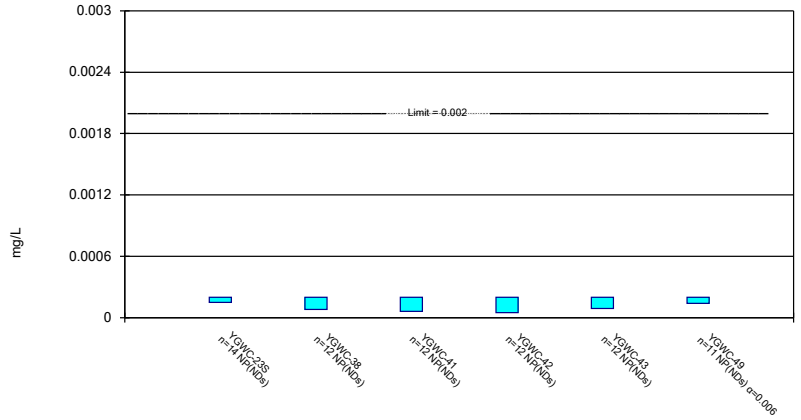
Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted.

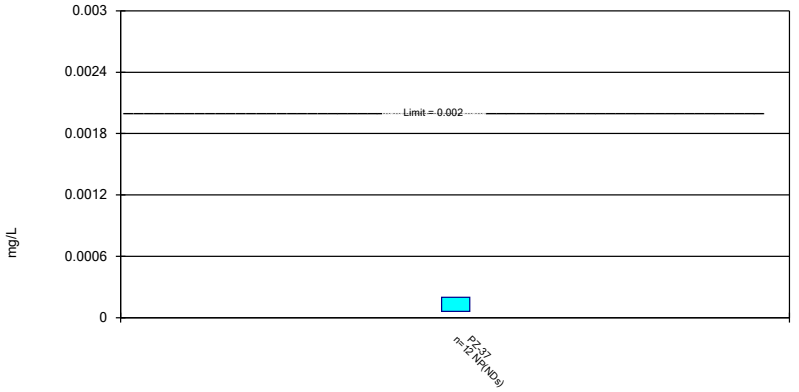


Constituent: Mercury Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01.

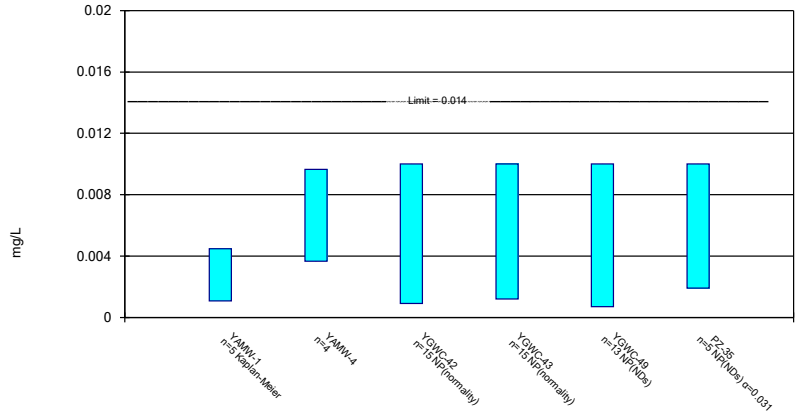


Constituent: Mercury Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

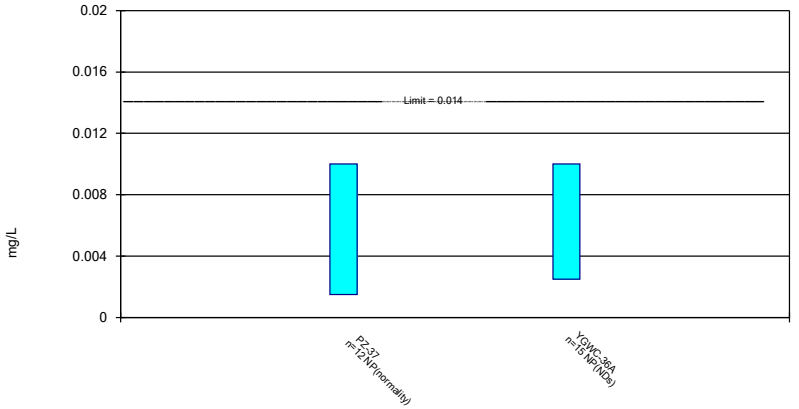


Constituent: Molybdenum Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Non-Parametric Confidence Interval

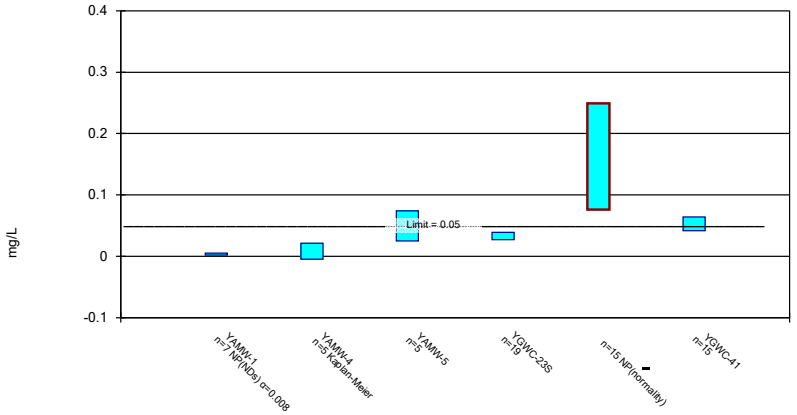
Compliance Limit is not exceeded. Per-well alpha = 0.01.



Constituent: Molybdenum Analysis Run 11/19/2021 9:53 AM View: Appendix IV
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



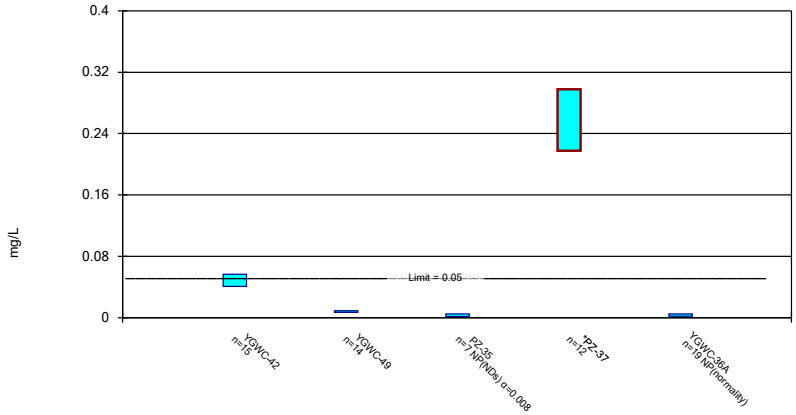
Constituent: Selenium Analysis Run 11/19/2021 9:53 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Selenium Analysis Run 11/19/2021 9:53 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.003		
7/28/2016				<0.003		
9/20/2016				<0.003		
11/8/2016				<0.003		
1/16/2017				<0.003		
3/9/2017				<0.003		
5/2/2017				<0.003		
7/10/2017				<0.003		
10/12/2017					<0.003	<0.003
11/20/2017					<0.003	
11/21/2017						<0.003
1/11/2018						<0.003
1/12/2018					<0.003	
2/19/2018						<0.003
2/20/2018					<0.003	
3/30/2018				<0.003		
4/3/2018					<0.003	<0.003
6/27/2018						<0.003
6/28/2018					<0.003	
8/7/2018					0.0015 (J)	<0.003
9/24/2018					<0.003	<0.003
3/6/2019				<0.003		
4/4/2019				<0.003		
8/22/2019					<0.003	<0.003
9/26/2019	<0.003					
9/27/2019				0.00029 (J)		
3/25/2020	<0.003				0.00063 (J)	<0.003
3/26/2020				<0.003		
9/23/2020		0.00065 (J)				
9/24/2020	<0.003		0.00033 (J)	0.00085 (J)		
9/25/2020					0.00061 (J)	<0.003
2/9/2021	0.00037 (J)	0.0011 (J)	<0.003	0.00052 (J)	0.00031 (J)	
2/10/2021						0.0014 (J)
3/3/2021	0.025	0.00062 (J)				
3/4/2021			<0.003	<0.003	<0.003	<0.003
8/25/2021		<0.003		<0.003		
8/26/2021			<0.003		<0.003	<0.003
9/1/2021	0.0024 (J)					
Mean	0.006128	0.001343	0.002333	0.002568	0.002361	0.002886
Std. Dev.	0.009301	0.001127	0.001335	0.0009666	0.001078	0.0004276
Upper Lim.	0.01261	0.001325	0.003	0.003	0.003	0.003
Lower Lim.	0.0002101	0.0003728	0.00033	0.00085	0.00063	0.0014

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
6/8/2016						<0.003
8/1/2016						<0.003
8/30/2016	<0.003					
8/31/2016		<0.003				
9/1/2016			<0.003			
9/20/2016						0.0009 (J)
11/8/2016						<0.003
11/15/2016			<0.003			
11/16/2016	<0.003	<0.003				
1/17/2017						<0.003
2/24/2017		<0.003				
2/27/2017	<0.003		0.0011 (J)			
3/8/2017						<0.003
5/2/2017						<0.003
5/9/2017			<0.003			
5/10/2017	<0.003	<0.003				
7/7/2017						<0.003
7/11/2017	<0.003	<0.003				
7/13/2017			<0.003			
10/11/2017			<0.003			
10/12/2017	<0.003	<0.003			<0.003	
11/21/2017					<0.003	
1/11/2018					<0.003	
2/20/2018					<0.003	
3/30/2018						<0.003
4/3/2018					<0.003	
4/4/2018	<0.003	<0.003	<0.003			
6/29/2018					<0.003	
8/6/2018					<0.003	
9/20/2018	<0.003	<0.003	<0.003			
9/24/2018					<0.003	
3/5/2019						<0.003
4/4/2019						<0.003
8/21/2019		<0.003				
8/22/2019	<0.003					
9/26/2019			<0.003	<0.003		<0.003
3/25/2020	<0.003	0.00031 (J)	0.00053 (J)	<0.003		
3/26/2020						<0.003
9/23/2020						<0.003
9/24/2020	<0.003		<0.003	<0.003		
9/25/2020		<0.003			0.0014 (J)	
2/9/2021		<0.003	<0.003		0.00035 (J)	<0.003
2/10/2021	0.00053 (J)			<0.003		
3/3/2021						<0.003
3/4/2021	<0.003	<0.003	<0.003	0.00039 (J)	<0.003	
8/25/2021	<0.003				<0.003	
9/1/2021			<0.003	<0.003		<0.003
9/27/2021		<0.003				
Mean	0.002824	0.002808	0.002688	0.002565	0.002646	0.002876
Std. Dev.	0.0006601	0.0007189	0.0008013	0.001066	0.0008569	0.0005093
Upper Lim.	0.003	0.003	0.003	0.003	0.003	0.003
Lower Lim.	0.00053	0.00031	0.0011	0.00039	0.0014	0.0009

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-36A
9/2/2016	<0.003
11/14/2016	0.0014 (J)
2/28/2017	0.0004 (J)
5/9/2017	<0.003
7/13/2017	<0.003
9/22/2017	<0.003
9/29/2017	<0.003
10/6/2017	<0.003
3/30/2018	<0.003
3/6/2019	0.0011 (J)
4/4/2019	0.0041
9/26/2019	0.0065
3/25/2020	0.0011 (J)
10/7/2020	<0.003
2/10/2021	0.028
3/4/2021	0.0015 (J)
9/3/2021	0.0016 (J)
Mean	0.0041
Std. Dev.	0.006318
Upper Lim.	0.0041
Lower Lim.	0.0014

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/7/2016			<0.005			
7/28/2016			<0.005			
8/30/2016						0.0023 (J)
9/20/2016			<0.005			
11/8/2016			<0.005			
11/16/2016						0.0017 (J)
1/16/2017			<0.005			
2/27/2017						0.002 (J)
3/9/2017			<0.005			
5/2/2017			<0.005			
5/10/2017						0.0022 (J)
7/10/2017			<0.005			
7/11/2017						0.003 (J)
10/12/2017				0.0023 (J)	0.0011 (J)	0.0031 (J)
11/20/2017				0.0008 (J)		
11/21/2017					<0.005	
1/11/2018					<0.005	
1/12/2018				0.001 (J)		
2/19/2018					<0.005	
2/20/2018				0.00096 (J)		
3/30/2018			<0.005			
4/3/2018				0.0015 (J)	0.00072 (J)	
4/4/2018						0.0023 (J)
6/12/2018			<0.005			
6/27/2018					0.00062 (J)	
6/28/2018				0.0017 (J)		
8/7/2018				0.00072 (J)	<0.005	
9/20/2018						0.0018 (J)
9/24/2018				0.0017 (J)	0.001 (J)	
9/27/2018			<0.005			
3/6/2019			<0.005			
4/4/2019			<0.005			
8/22/2019				0.00055 (J)	0.00036 (J)	0.00089 (J)
9/27/2019			<0.005			
10/9/2019				0.00057 (J)	0.00052 (J)	0.00078 (J)
3/25/2020				0.00068 (J)	0.001 (J)	0.0013 (J)
3/26/2020			0.0012 (J)			
9/23/2020	<0.005					
9/24/2020		0.0015 (J)	<0.005			<0.005
9/25/2020				<0.005	<0.005	
2/9/2021	0.001 (J)	0.00095 (J)	<0.005	0.00098 (J)		
2/10/2021					<0.005	0.0016 (J)
3/3/2021	0.00079 (J)					
3/4/2021		<0.005	<0.005	<0.005	<0.005	<0.005
8/25/2021	<0.005		<0.005			0.0014 (J)
8/26/2021		<0.005		0.0013 (J)	<0.005	
Mean	0.002947	0.003112	0.0048	0.001651	0.003021	0.002291
Std. Dev.	0.002372	0.002191	0.0008718	0.001446	0.002197	0.001282
Upper Lim.	0.005	0.001914	0.005	0.00204	0.005	0.003008
Lower Lim.	0.00079	0.0006656	0.0012	0.0007945	0.00062	0.001423

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
6/8/2016					<0.005	
8/1/2016					<0.005	
8/31/2016	<0.005					
9/1/2016		<0.005				
9/2/2016						<0.005
9/20/2016					<0.005	
11/8/2016					<0.005	
11/14/2016						<0.005
11/15/2016		<0.005				
11/16/2016	<0.005					
1/17/2017					<0.005	
2/24/2017	<0.005					
2/27/2017		<0.005				
2/28/2017						0.0006 (J)
3/8/2017					<0.005	
5/2/2017					<0.005	
5/9/2017		<0.005				0.0006 (J)
5/10/2017	<0.005					
7/7/2017					<0.005	
7/11/2017	<0.005					
7/13/2017		<0.005				<0.005
9/22/2017						<0.005
9/29/2017						<0.005
10/6/2017						<0.005
10/11/2017		0.0006 (J)				
10/12/2017	<0.005			0.0014 (J)		
11/21/2017				0.0008 (J)		
1/11/2018				0.0006 (J)		
2/20/2018				<0.005		
3/30/2018					<0.005	<0.005
4/3/2018				0.0012 (J)		
4/4/2018	<0.005	<0.005				
6/12/2018					<0.005	
6/13/2018						0.00066 (J)
6/29/2018				0.0011 (J)		
8/6/2018				<0.005		
9/20/2018	0.00099 (J)	0.001 (J)				
9/24/2018				0.00094 (J)		
9/26/2018					<0.005	<0.005
10/16/2018			0.00069 (J)			
3/5/2019					<0.005	
3/6/2019						<0.005
4/4/2019					<0.005	<0.005
8/21/2019	<0.005					
9/26/2019		<0.005	<0.005		<0.005	<0.005
10/9/2019	0.00051 (J)					
3/25/2020	0.0007 (J)	0.00086 (J)	<0.005			<0.005
3/26/2020					0.0015 (J)	
9/23/2020					<0.005	
9/24/2020		<0.005	<0.005			
9/25/2020	<0.005			<0.005		
10/7/2020						<0.005

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA	YGWC-36A
2/9/2021	<0.005	<0.005		0.0015 (J)	<0.005	
2/10/2021			0.00096 (J)			0.00088 (J)
3/3/2021					<0.005	
3/4/2021	<0.005	<0.005	<0.005	<0.005		<0.005
8/25/2021				0.0014 (J)		
9/1/2021		<0.005	<0.005		<0.005	
9/3/2021						<0.005
9/27/2021	<0.005					
Mean	0.004147	0.004104	0.003807	0.002412	0.004816	0.004092
Std. Dev.	0.001769	0.001782	0.002039	0.001928	0.000803	0.001808
Upper Lim.	0.005	0.005	0.005	0.005	0.005	0.005
Lower Lim.	0.00099	0.001	0.00069	0.0008	0.0015	0.00088

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-23S	YGWC-38
6/7/2016					0.045	
7/28/2016					0.0511	
9/20/2016					0.0561	
11/8/2016					0.054	
1/16/2017					0.0528	
3/9/2017					0.0469	
5/2/2017					0.0427	
7/10/2017					0.0395	
10/12/2017						0.0269
11/20/2017						0.0255
1/12/2018						0.0236
2/20/2018						0.0255
3/30/2018					0.03	
4/3/2018						0.023
6/12/2018					0.024	
6/28/2018						0.024
8/7/2018						0.023
9/24/2018						0.021
9/27/2018					0.022	
10/16/2018	0.048					
3/6/2019					0.019	
4/4/2019					0.019	
8/22/2019						0.019
9/26/2019	0.047					
9/27/2019					0.018	
10/9/2019						0.019
3/25/2020	0.04					0.018
3/26/2020					0.027	
9/23/2020		0.0092 (J)	0.0063 (J)			
9/24/2020	0.028			0.057	0.035	
9/25/2020						0.015
2/9/2021	0.039	0.0085 (J)	0.02	0.042	0.042	0.016
3/3/2021	0.035	0.0082	0.021			
3/4/2021				0.039	0.043	0.016
8/25/2021			0.0037 (J)		0.049	
8/26/2021				0.036		0.016
9/1/2021	0.075	0.0072				
Mean	0.04457	0.008275	0.01275	0.0435	0.03769	0.02077
Std. Dev.	0.01506	0.0008302	0.009021	0.009327	0.01303	0.00402
Upper Lim.	0.06247	0.01016	0.03323	0.06468	0.04532	0.02349
Lower Lim.	0.02668	0.00639	-0.007731	0.02232	0.03006	0.01804

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-41	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37
8/30/2016		0.0455				
8/31/2016			0.0065 (J)			
9/1/2016				0.077		
11/15/2016				0.0772		
11/16/2016		0.0541	0.0092 (J)			
2/24/2017			0.0144			
2/27/2017		0.0573		0.0888		
5/9/2017				0.0792		
5/10/2017		0.0517	0.0173			
7/11/2017		0.0451	0.0183			
7/13/2017				0.0839		
10/11/2017				0.078		
10/12/2017	0.0394	0.0429	0.0205			0.064
11/21/2017	0.032					0.0579
1/11/2018	0.03					0.0549
2/19/2018	0.0308					
2/20/2018						0.0593
4/3/2018	0.03					0.051
4/4/2018		0.041	0.024	0.074		
6/27/2018	0.028					
6/29/2018						0.054
8/6/2018						0.048
8/7/2018	0.027					
9/20/2018		0.038	0.035	0.074		
9/24/2018	0.026					0.047
10/16/2018					0.063	
8/21/2019			0.03			
8/22/2019	0.021	0.031				
9/26/2019				0.065	0.039	
10/9/2019	0.021	0.027	0.04			
3/25/2020	0.021	0.03	0.033	0.071	0.039	
9/24/2020		0.026		0.066	0.034	
9/25/2020	0.016		0.046			0.034
2/9/2021			0.041	0.071		0.036
2/10/2021	0.017	0.031			0.032	
3/4/2021	0.017	0.03	0.039	0.069	0.033	0.036
8/25/2021		0.027				0.035
8/26/2021	0.018					
9/1/2021				0.066	0.067	
9/27/2021			0.0097			
Mean	0.02495	0.03851	0.02559	0.07429	0.04386	0.04809
Std. Dev.	0.006866	0.01058	0.013	0.006962	0.01475	0.01057
Upper Lim.	0.0296	0.04568	0.0344	0.07922	0.067	0.05638
Lower Lim.	0.02029	0.03134	0.01678	0.06936	0.032	0.0398

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-24SA	YGWC-36A
6/8/2016	0.02	
8/1/2016	0.02	
9/2/2016		0.0409
9/20/2016	0.0203	
11/8/2016	0.0191	
11/14/2016		0.0182
1/17/2017	0.0192	
2/28/2017		0.023
3/8/2017	0.0189	
5/2/2017	0.019	
5/9/2017		0.0349
7/7/2017	0.019	
7/13/2017		0.0484
9/22/2017		0.0491
9/29/2017		0.0452
10/6/2017		0.0508
3/30/2018	0.02	0.043
6/12/2018	0.018	
6/13/2018		0.046
9/26/2018	0.019	0.048
3/5/2019	0.019	
3/6/2019		0.041
4/4/2019	0.02	0.042
9/26/2019	0.017	0.025
3/25/2020		0.025
3/26/2020	0.019	
9/23/2020	0.026	
10/7/2020		0.04
2/9/2021	0.031	
2/10/2021		0.035
3/3/2021	0.025	
3/4/2021		0.028
9/1/2021	0.025	
9/3/2021		0.038
Mean	0.02076	0.03797
Std. Dev.	0.00347	0.009852
Upper Lim.	0.0203	0.04374
Lower Lim.	0.0189	0.0322

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.0005		
7/28/2016				<0.0005		
9/20/2016				0.0001 (J)		
11/8/2016				<0.0005		
1/16/2017				0.0001 (J)		
3/9/2017				0.0001 (J)		
5/2/2017				9E-05 (J)		
7/10/2017				<0.0005		
10/12/2017					0.0057	0.0036
11/20/2017					0.0053	
11/21/2017						0.0036
1/11/2018						0.0037
1/12/2018					0.0053	
2/19/2018						0.0039
2/20/2018					0.0053	
3/30/2018				<0.0005		
4/3/2018					0.0056	0.0037
6/12/2018				8.1E-05 (J)		
6/27/2018						0.0038
6/28/2018					0.0059	
8/7/2018					0.0058	0.0037
9/24/2018					0.0051	0.0032
9/27/2018				9E-05 (J)		
10/16/2018	<0.0005					
3/6/2019				6.6E-05 (J)		
4/4/2019				7.2E-05 (J)		
8/22/2019					0.0049	0.0026 (J)
9/26/2019	<0.0005					
9/27/2019				7.7E-05 (J)		
10/9/2019					0.0046	0.0026 (J)
1/15/2020			0.00017 (J)			
3/25/2020	0.00037 (J)				0.0038	0.0026 (J)
3/26/2020				9E-05 (J)		
9/23/2020		<0.0005				
9/24/2020	5.8E-05 (J)		8.6E-05 (J)	0.00015 (J)		
9/25/2020					0.0033	0.002 (J)
2/9/2021	<0.0005	5.1E-05 (J)	0.00015 (J)	0.00015 (J)	0.0029 (J)	
2/10/2021						0.0015 (J)
3/3/2021	<0.0005	<0.0005				
3/4/2021			0.00013 (J)	0.00013 (J)	0.0029	0.0015
8/25/2021				0.00019 (J)		
8/26/2021			0.00012 (J)		0.0028	0.0012
9/1/2021	9.5E-05 (J)	6.5E-05 (J)				
Mean	0.0003604	0.000279	0.0001312	0.0002098	0.004613	0.00288
Std. Dev.	0.0002	0.0002553	3.174E-05	0.0001808	0.001149	0.0009518
Upper Lim.	0.0005	0.0005	0.0001844	0.0005	0.005425	0.0038
Lower Lim.	5.8E-05	5.1E-05	7.802E-05	8.1E-05	0.004108	0.0015

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
6/8/2016						<0.0005
8/1/2016						0.0001 (J)
8/30/2016	9E-05 (J)					
8/31/2016		<0.0005				
9/1/2016			0.0001 (J)			
9/20/2016						0.0001 (J)
11/8/2016						<0.0005
11/15/2016			0.0001 (J)			
11/16/2016	<0.0005	<0.0005				
1/17/2017						0.0001 (J)
2/24/2017		<0.0005				
2/27/2017	<0.0005		0.0001 (J)			
3/8/2017						0.0001 (J)
5/2/2017						0.0001 (J)
5/9/2017			0.0001 (J)			
5/10/2017	9E-05 (J)	<0.0005				
7/7/2017						0.0001 (J)
7/11/2017	0.0001 (J)	<0.0005				
7/13/2017			0.0001 (J)			
10/11/2017			0.0001 (J)			
10/12/2017	<0.0005	0.0001 (J)			0.0004 (J)	
11/21/2017					0.0004 (J)	
1/11/2018					0.0003 (J)	
2/20/2018					<0.0005	
3/30/2018						<0.0005
4/3/2018					<0.0005	
4/4/2018	<0.0005	<0.0005	<0.0005			
6/12/2018						0.00012 (J)
6/29/2018					0.00033 (J)	
8/6/2018					0.0002 (J)	
8/30/2018				0.00052 (J)		
9/20/2018	<0.0005	0.00029 (J)	0.00011 (J)			
9/24/2018					0.00029 (J)	
9/26/2018						0.00014 (J)
10/16/2018				0.00036 (J)		
3/5/2019						0.00016 (J)
4/4/2019						0.00015 (J)
8/21/2019		0.0003 (J)				
8/22/2019	<0.0005					
9/26/2019			0.00013 (J)	<0.0005		0.00014 (J)
10/9/2019	<0.0005	0.00034 (J)				
3/25/2020	<0.0005	0.00034 (J)	0.00013 (J)	<0.0005		
3/26/2020						0.00016 (J)
9/23/2020						6.1E-05 (J)
9/24/2020	6.7E-05 (J)		0.00013 (J)	0.00033 (J)		
9/25/2020		0.00054 (J)			0.00031 (J)	
2/9/2021		0.00053 (J)	0.00013 (J)		0.00029 (J)	0.00013 (J)
2/10/2021	5.7E-05 (J)			0.00025 (J)		
3/3/2021						9.9E-05 (J)
3/4/2021	<0.0005	0.00056	0.0001 (J)	0.00025 (J)	0.00017 (J)	
8/25/2021	<0.0005				0.00059	
9/1/2021			0.00012 (J)	0.00045 (J)		0.00014 (J)

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
9/27/2021		0.00015 (J)				
Mean	0.0003603	0.00041	0.0001393	0.000395	0.0003567	0.0001789
Std. Dev.	0.0002048	0.000147	0.0001047	0.0001122	0.0001256	0.0001451
Upper Lim.	0.0005	0.00053	0.00013	0.0004523	0.0003866	0.00016
Lower Lim.	9E-05	0.00029	0.0001	0.0002517	0.0002088	0.0001

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-36A
9/2/2016	0.0003 (J)
11/14/2016	9E-05 (J)
2/28/2017	0.0001 (J)
5/9/2017	0.0002 (J)
7/13/2017	0.0003 (J)
9/22/2017	0.0003 (J)
9/29/2017	0.0003 (J)
10/6/2017	0.0003 (J)
3/30/2018	<0.0005
6/13/2018	0.00035 (J)
9/26/2018	0.00032 (J)
3/6/2019	0.00029 (J)
4/4/2019	0.00033 (J)
9/26/2019	0.00029 (J)
3/25/2020	0.00022 (J)
10/7/2020	0.00014 (J)
2/10/2021	9.9E-05 (J)
3/4/2021	0.00016 (J)
9/3/2021	0.00035 (J)
Mean	0.0002599
Std. Dev.	0.000106
Upper Lim.	0.000322
Lower Lim.	0.0001979

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-5	YGWC-23S	YGWC-38	YGWC-41	YGWC-42
6/7/2016			<0.0005			
7/28/2016			<0.0005			
8/30/2016						<0.0005
9/20/2016			<0.0005			
11/8/2016			7E-05 (J)			
11/16/2016						<0.0005
1/16/2017			<0.0005			
2/27/2017						<0.0005
3/9/2017			<0.0005			
5/2/2017			<0.0005			
5/10/2017						0.0002 (J)
7/10/2017			<0.0005			
7/11/2017						0.0005 (J)
10/12/2017				0.003	0.0002 (J)	0.0006 (J)
11/20/2017				0.0027		
11/21/2017					0.0003 (J)	
1/11/2018					0.0002 (J)	
1/12/2018				0.0029		
2/19/2018					<0.0005	
2/20/2018				0.0029		
3/30/2018			<0.0005			
4/3/2018				0.0027	<0.0005	
4/4/2018						<0.0005
6/12/2018			<0.0005			
6/27/2018					0.00025 (J)	
6/28/2018				0.0029		
8/7/2018				0.0027	0.00024 (J)	
9/20/2018						0.0002 (J)
9/24/2018				0.0027	0.00021 (J)	
9/27/2018			<0.0005			
10/16/2018	0.00014 (J)					
3/6/2019			<0.0005			
4/4/2019			<0.0005			
8/22/2019				0.0023 (J)	0.00015 (J)	0.00017 (J)
9/26/2019	<0.0005					
9/27/2019			<0.0005			
10/9/2019				0.0021 (J)	0.00017 (J)	0.00025 (J)
3/25/2020	<0.0005			0.0018 (J)	0.00018 (J)	0.00021 (J)
3/26/2020			<0.0005			
9/24/2020	0.00017 (J)	0.00018 (J)	<0.0005			0.00014 (J)
9/25/2020				0.0015 (J)	0.00014 (J)	
2/9/2021	0.00013 (J)	0.00025 (J)	<0.0005	0.0014 (J)		
2/10/2021					<0.0005	<0.0005
3/3/2021	<0.0005					
3/4/2021		0.00018 (J)	<0.0005	0.0013	<0.0005	<0.0005
8/25/2021			<0.0005			<0.0005
8/26/2021		0.00021 (J)		0.0011	<0.0005	
9/1/2021	0.00023 (J)					
Mean	0.00031	0.000205	0.0004774	0.002267	0.0003027	0.0003847
Std. Dev.	0.0001806	3.317E-05	9.865E-05	0.0006747	0.0001496	0.0001638
Upper Lim.	0.0005	0.0002803	0.0005	0.0029	0.0005	0.0006
Lower Lim.	0.00013	0.0001297	7E-05	0.0014	0.00017	0.0002

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-49	PZ-35	PZ-37	YGWC-36A
9/1/2016	<0.0005			
9/2/2016				<0.0005
11/14/2016				9E-05 (J)
11/15/2016	<0.0005			
2/27/2017	7E-05 (J)			
2/28/2017				0.0001 (J)
5/9/2017	<0.0005			0.0002 (J)
7/13/2017	<0.0005			0.0002 (J)
9/22/2017				0.0002 (J)
9/29/2017				0.0002 (J)
10/6/2017				0.0002 (J)
10/11/2017	<0.0005			
10/12/2017			0.0002 (J)	
11/21/2017			0.0002 (J)	
1/11/2018			0.0004 (J)	
2/20/2018			<0.0005	
3/30/2018				<0.0005
4/3/2018			<0.0005	
4/4/2018	<0.0005			
6/13/2018				0.00019 (J)
6/29/2018			0.00099 (J)	
8/6/2018			0.00063 (J)	
9/20/2018	<0.0005			
9/24/2018			0.00069 (J)	
9/26/2018				0.00018 (J)
10/16/2018		<0.0005		
3/6/2019				0.00015 (J)
4/4/2019				0.00019 (J)
9/26/2019	<0.0005	<0.0005		0.00017 (J)
3/25/2020	<0.0005	0.00016 (J)		0.00019 (J)
9/24/2020	<0.0005	<0.0005		
9/25/2020			0.00039 (J)	
10/7/2020				0.00012 (J)
2/9/2021	<0.0005		0.00042 (J)	
2/10/2021		<0.0005		<0.0005
3/4/2021	<0.0005	<0.0005	0.00028 (J)	<0.0005
8/25/2021			0.00094	
9/1/2021	<0.0005	<0.0005		
9/3/2021				<0.0005
Mean	0.0004693	0.0004514	0.0005117	0.0002568
Std. Dev.	0.0001149	0.0001285	0.0002597	0.000153
Upper Lim.	0.0005	0.0005	0.0006865	0.0005
Lower Lim.	7E-05	0.00016	0.0002751	0.00015

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.005		
7/28/2016				0.0008 (J)		
9/20/2016				<0.005		
11/8/2016				<0.005		
1/16/2017				<0.005		
3/9/2017				<0.005		
5/2/2017				0.0007 (J)		
7/10/2017				<0.005		
10/12/2017					0.0005 (J)	<0.005
11/20/2017					<0.005	
11/21/2017						<0.005
1/11/2018						<0.005
1/12/2018					<0.005	
2/19/2018						<0.005
2/20/2018					<0.005	
3/30/2018				<0.005		
4/3/2018					<0.005	<0.005
6/27/2018						<0.005
6/28/2018					<0.005	
8/7/2018					<0.005	<0.005
9/24/2018					<0.005	<0.005
3/6/2019				<0.005		
8/22/2019					<0.005	<0.005
10/9/2019					<0.005	<0.005
3/25/2020	0.00058 (J)				0.00065 (J)	0.00039 (J)
3/26/2020				0.0019 (J)		
9/23/2020		0.00071 (J)	<0.005			
9/24/2020	0.00074 (J)			0.0011 (J)		
9/25/2020					<0.005	<0.005
2/9/2021	0.001 (J)	0.0011 (J)	0.00057 (J)	0.00086 (J)	<0.005	
2/10/2021						<0.005
3/3/2021	0.00076 (J)	0.0012 (J)	<0.005			
3/4/2021				0.00078 (J)	<0.005	<0.005
8/25/2021			<0.005	<0.005		
8/26/2021					<0.005	<0.005
9/1/2021	<0.005	0.003 (J)				
Mean	0.001616	0.001503	0.003892	0.003409	0.00441	0.004693
Std. Dev.	0.001898	0.00102	0.002215	0.002034	0.001557	0.00119
Upper Lim.	0.005	0.003819	0.005	0.005	0.005	0.005
Lower Lim.	0.00058	-0.0008143	0.00057	0.0008	0.00065	0.00039

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-24SA
6/8/2016						<0.005
8/1/2016						<0.005
8/30/2016	<0.005					
8/31/2016		<0.005				
9/1/2016			0.0013 (J)			
9/20/2016						<0.005
11/8/2016						<0.005
11/15/2016			0.0014 (J)			
11/16/2016	<0.005	<0.005				
1/17/2017						<0.005
2/24/2017		<0.005				
2/27/2017	<0.005		0.0016 (J)			
3/8/2017						<0.005
5/2/2017						0.0011 (J)
5/9/2017			0.0017 (J)			
5/10/2017	0.0006 (J)	0.0005 (J)				
7/7/2017						<0.005
7/11/2017	<0.005	<0.005				
7/13/2017			0.0019 (J)			
10/11/2017			0.0014 (J)			
10/12/2017	<0.005	<0.005			0.0019 (J)	
11/21/2017					0.0017 (J)	
1/11/2018					0.001 (J)	
2/20/2018					<0.005	
3/30/2018						<0.005
4/3/2018					<0.005	
4/4/2018	<0.005	<0.005	<0.005			
6/29/2018					<0.005	
8/6/2018					<0.005	
9/20/2018	<0.005	<0.005	0.0017 (J)			
9/24/2018					<0.005	
3/5/2019						<0.005
8/21/2019		0.00062 (J)				
8/22/2019	<0.005					
10/9/2019	0.00043 (J)	0.00074 (J)				
3/25/2020	0.0013 (J)	<0.005	0.0019 (J)	0.0012 (J)		
3/26/2020						0.00094 (J)
9/23/2020						<0.005
9/24/2020	<0.005		0.0019 (J)	0.00061 (J)		
9/25/2020		0.00071 (J)			<0.005	
2/9/2021		<0.005	0.002 (J)		<0.005	0.0011 (J)
2/10/2021	<0.005			0.0006 (J)		
3/3/2021						<0.005
3/4/2021	<0.005	<0.005	0.0017 (J)	0.0007 (J)	<0.005	
8/25/2021	<0.005				<0.005	
9/1/2021			0.002 (J)	<0.005		<0.005
9/27/2021		<0.005				
Mean	0.004155	0.003838	0.001962	0.001622	0.004133	0.004209
Std. Dev.	0.001757	0.001995	0.0009421	0.001904	0.001581	0.001637
Upper Lim.	0.005	0.005	0.002	0.005	0.005	0.005
Lower Lim.	0.0013	0.00071	0.0014	0.0006	0.0017	0.0011

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-36A
9/2/2016	<0.005
11/14/2016	0.0035
2/28/2017	<0.005
5/9/2017	<0.005
7/13/2017	<0.005
9/22/2017	<0.005
9/29/2017	<0.005
10/6/2017	<0.005
3/30/2018	<0.005
3/6/2019	<0.005
3/25/2020	0.00074 (J)
10/7/2020	0.0013 (J)
2/10/2021	0.00094 (J)
3/4/2021	<0.005
9/3/2021	<0.005
Mean	0.004099
Std. Dev.	0.001656
Upper Lim.	0.005
Lower Lim.	0.0013

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-41	YGWC-42
8/30/2016						0.0025 (J)
11/16/2016						0.002 (J)
2/27/2017						0.0021 (J)
5/10/2017						0.0021 (J)
7/11/2017						0.0014 (J)
10/12/2017					0.0011 (J)	0.0017 (J)
11/21/2017					0.0003 (J)	
1/11/2018					0.0003 (J)	
2/19/2018					<0.005	
4/3/2018					<0.005	
4/4/2018						<0.005
6/27/2018					0.00069 (J)	
8/7/2018					<0.005	
9/20/2018						0.003 (J)
9/24/2018					<0.005	
10/16/2018	0.032					
8/22/2019					<0.005	0.0019 (J)
9/26/2019	0.015					
10/9/2019					<0.005	0.0019 (J)
1/3/2020	<0.005					
3/25/2020	<0.005				<0.005	0.0018 (J)
9/23/2020		0.0025 (J)	0.00052 (J)			
9/24/2020	0.01			0.00077 (J)		0.0017 (J)
9/25/2020					<0.005	
2/9/2021	0.03	0.001 (J)	0.00063 (J)	<0.005		
2/10/2021					<0.005	0.0019 (J)
3/3/2021	0.018	0.00082 (J)	0.001 (J)			
3/4/2021				<0.005	<0.005	0.0018 (J)
8/25/2021			0.00041 (J)			0.0014 (J)
8/26/2021				<0.005	<0.005	
9/1/2021	0.022	0.00093 (J)				
Mean	0.01712	0.001313	0.00064	0.003942	0.003826	0.002147
Std. Dev.	0.01043	0.0007951	0.0002563	0.002115	0.002023	0.0008847
Upper Lim.	0.02746	0.0025	0.001222	0.005	0.005	0.0025
Lower Lim.	0.006788	0.00082	5.821E-05	0.00077	0.00069	0.0017

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-36A
8/31/2016	<0.005				
9/1/2016		<0.005			
9/2/2016					0.0006 (J)
11/14/2016					<0.005
11/15/2016		0.0006 (J)			
11/16/2016	<0.005				
2/24/2017	<0.005				
2/27/2017		0.0008 (J)			
2/28/2017					<0.005
5/9/2017		<0.005			<0.005
5/10/2017	<0.005				
7/11/2017	<0.005				
7/13/2017		0.0005 (J)			<0.005
9/22/2017					<0.005
9/29/2017					<0.005
10/6/2017					<0.005
10/11/2017		0.0006 (J)			
10/12/2017	0.0006 (J)			0.0078 (J)	
11/21/2017				0.0097 (J)	
1/11/2018				0.0131	
2/20/2018				0.0162	
3/30/2018					<0.005
4/3/2018				0.015	
4/4/2018	<0.005	<0.005			
6/13/2018					<0.005
6/29/2018				0.013	
8/6/2018				0.0053 (J)	
9/20/2018	0.0034 (J)	<0.005			
9/24/2018				0.0071 (J)	
9/26/2018					<0.005
10/16/2018			<0.005		
3/6/2019					<0.005
4/4/2019					<0.005
8/21/2019	0.0026 (J)				
9/26/2019		<0.005	<0.005		0.00048 (J)
10/9/2019	0.0023 (J)				
3/25/2020	0.0016 (J)	<0.005	0.0059		0.00038 (J)
9/24/2020		<0.005	<0.005		
9/25/2020	0.0018 (J)			0.0023 (J)	
10/7/2020					0.00086 (J)
2/9/2021	0.0017 (J)	<0.005		0.0023 (J)	
2/10/2021			<0.005		0.00038 (J)
3/4/2021	0.0015 (J)	<0.005	<0.005	0.003 (J)	<0.005
8/25/2021				0.0068	
9/1/2021		<0.005	<0.005		
9/3/2021					<0.005
9/27/2021	<0.005				
Mean	0.003367	0.00375	0.005129	0.008467	0.003826
Std. Dev.	0.001688	0.002052	0.0003402	0.004928	0.00202
Upper Lim.	0.005	0.005	0.0059	0.01233	0.005
Lower Lim.	0.0016	0.0006	0.005	0.0046	0.0006

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-23S	YGWC-38
6/7/2016					0.303 (U)	
7/28/2016					0.386 (U)	
9/20/2016					1.47	
11/8/2016					0.22 (U)	
1/16/2017					0.147 (U)	
3/9/2017					0.0892 (U)	
5/2/2017					0.149 (U)	
7/10/2017					0.815 (U)	
10/12/2017						1.24
11/20/2017						0.342 (U)
1/12/2018						1.04
2/20/2018						1.6 (U)
3/30/2018					0.659 (U)	
4/3/2018						0.726 (U)
6/12/2018					1.03 (U)	
6/28/2018						1.06 (U)
8/7/2018						1.21
9/24/2018						1.52
9/27/2018					1.06 (U)	
10/16/2018	0.384 (U)					
3/6/2019					0.736 (U)	
4/4/2019					0.474 (U)	
8/22/2019						1.97
9/27/2019					0.684 (U)	
10/8/2019						0.751 (U)
3/25/2020	0.525 (U)					0.321 (U)
3/26/2020					0.281 (U)	
9/23/2020		0.0813 (U)	1.2 (U)			
9/24/2020	0.547 (U)			0.668 (U)	0.788 (U)	
9/25/2020						0.246 (U)
2/9/2021	0.866 (U)	0.492 (U)	0.659 (U)	1.07 (U)	0.464 (U)	0.626 (U)
3/3/2021	0.377 (U)	0.563 (U)	1.07			
3/4/2021				1.46	0.771 (U)	0.816 (U)
8/25/2021			0.0991 (U)		0.624 (U)	
8/26/2021				0.724 (U)		0.427 (U)
9/1/2021	0.676 (U)	0.761 (U)				
Mean	0.5625	0.4743	0.757	0.9805	0.5869	0.9263
Std. Dev.	0.186	0.2857	0.4955	0.3658	0.3632	0.514
Upper Lim.	0.818	1.123	1.882	1.811	0.7995	1.275
Lower Lim.	0.307	-0.1743	-0.368	0.1501	0.3742	0.578

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-41	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37
8/30/2016		2.99				
8/31/2016			0.926 (U)			
9/1/2016				1.2		
11/15/2016				0.645 (U)		
11/16/2016		4.01	0.773 (U)			
2/24/2017			0.661 (U)			
2/27/2017		2.5		0.244 (U)		
5/9/2017				0.519 (U)		
5/10/2017		2.55	1.27			
7/11/2017		3.94	1.02			
7/13/2017				0.5 (U)		
10/11/2017				1.41		
10/12/2017	0.641 (U)	3.57	1.58			1.83
11/21/2017	2.01					1.33
1/11/2018	0.919 (U)					1.53
2/19/2018	1.82					
2/20/2018						2.75
4/3/2018	0.911 (U)					1.47
4/4/2018		1.9	1.71	0.442 (U)		
6/27/2018	0.429 (U)					
6/29/2018						1.69
8/6/2018						1.69
8/7/2018	0.579 (U)					
9/20/2018		1.94	2.8	1.14 (U)		
9/24/2018	1.39					2.26
10/16/2018					0.363 (U)	
8/21/2019			3.16			
8/22/2019	2.03	1.59				
9/26/2019				1.16 (U)		
10/8/2019	0.609 (U)	0.995 (U)	3.65			
3/25/2020	0.568 (U)	1.17 (U)	3.04	1.2 (U)	0.197 (U)	
9/24/2020		0.751 (U)		1.57 (U)	1.07 (U)	
9/25/2020	0.769 (U)		4.75			1.68 (U)
2/9/2021			6.38	0.137 (U)		1.52
2/10/2021	0.548 (U)	0.612 (U)			0.546 (U)	
3/4/2021	1.23	1.02	6.02	0.579 (U)	0.397 (U)	1.49
8/25/2021		0.978 (U)				1.41
8/26/2021	0.356 (U)					
9/1/2021				0.686 (U)	0.696 (U)	
9/27/2021			1.54			
Mean	0.9873	2.034	2.619	0.8166	0.5448	1.721
Std. Dev.	0.5741	1.17	1.878	0.4522	0.3081	0.4054
Upper Lim.	1.309	2.827	3.631	1.137	0.968	1.982
Lower Lim.	0.593	1.242	1.305	0.4963	0.1216	1.431

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-24SA	YGWC-36A
6/8/2016	1.06	
8/1/2016	0.467 (U)	
9/2/2016		0.873 (U)
9/20/2016	0.853 (U)	
9/22/2016		0.667 (U)
9/29/2016		1.63
10/6/2016		0.641 (U)
11/8/2016	0.433 (U)	
11/14/2016		0.0451 (U)
1/17/2017	0.0759 (U)	
2/28/2017		1.34 (U)
3/8/2017	0.479 (U)	
5/2/2017	0.506 (U)	
5/9/2017		0.309 (U)
7/7/2017	0.713 (U)	
7/13/2017		0.618 (U)
3/30/2018	0.409 (U)	0.721 (U)
6/12/2018	0.728 (U)	
6/13/2018		1.04 (U)
9/26/2018	0.981	0.604 (U)
3/5/2019	0.837 (U)	
3/6/2019		0.919 (U)
4/4/2019		1.05 (U)
4/9/2019	0.502 (U)	
9/26/2019	0.964 (U)	0.979 (U)
3/25/2020		1.22 (U)
3/26/2020	0.511 (U)	
9/23/2020	0.786 (U)	
10/7/2020		1.58
2/9/2021	0.678 (U)	
2/10/2021		0.466 (U)
3/3/2021	0.415 (U)	
3/4/2021		0.0671 (U)
9/1/2021	0.444 (U)	
9/3/2021		0.622 (U)
Mean	0.6233	0.8101
Std. Dev.	0.25	0.4439
Upper Lim.	0.7697	1.07
Lower Lim.	0.4768	0.5501

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-4	YGWC-23S	YGWC-38	YGWC-41	YGWC-42	YGWC-43
6/7/2016		<0.1				
7/28/2016		0.03 (J)				
8/30/2016					0.02 (J)	
8/31/2016						0.12 (J)
9/20/2016		<0.1				
11/8/2016		<0.1				
11/16/2016					0.07 (J)	0.2 (J)
1/16/2017		<0.1				
2/24/2017						0.21 (J)
2/27/2017					0.06 (J)	
3/9/2017		<0.1				
5/2/2017		<0.1				
5/10/2017					<0.1	0.04 (J)
7/10/2017		<0.1				
7/11/2017					<0.1	0.2 (J)
10/11/2017		<0.1				
10/12/2017			<0.1	<0.1	<0.1	0.1 (J)
11/20/2017			0.2 (J)			
11/21/2017				<0.1		
1/11/2018				<0.1		
1/12/2018			0.21 (J)			
2/19/2018				<0.1		
2/20/2018			<0.1			
3/30/2018		<0.1				
4/3/2018			0.41	<0.1		
4/4/2018					<0.1	<0.1
6/12/2018		<0.1				
6/27/2018				<0.1		
6/28/2018			0.43			
8/7/2018			<0.1	0.11 (J)		
9/20/2018					0.041 (J)	<0.1
9/24/2018			0.034 (J)	<0.1		
9/27/2018		<0.1				
3/6/2019		<0.1				
3/27/2019			0.24 (J)		<0.1	
3/28/2019				0.1 (J)		0.078 (J)
4/4/2019		0.049 (J)				
8/21/2019						0.062 (J)
8/22/2019			<0.1	<0.1	<0.1	
9/27/2019		0.12 (J)				
10/9/2019			<0.1	<0.1	<0.1	<0.1
3/25/2020			<0.1	<0.1	<0.1	0.073 (J)
3/26/2020		<0.1				
9/23/2020	<0.1					
9/24/2020		<0.1			<0.1	
9/25/2020			<0.1	<0.1		<0.1
2/9/2021	0.14	<0.1	<0.1			0.058 (J)
2/10/2021				<0.1	<0.1	
3/3/2021	0.14					
3/4/2021		<0.1	<0.1	<0.1	<0.1	0.063 (J)
8/25/2021	<0.1	<0.1			<0.1	
8/26/2021			<0.1	<0.1		

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-4	YGWC-23S	YGWC-38	YGWC-41	YGWC-42	YGWC-43
9/27/2021						0.1
Mean	0.12	0.09495	0.1578	0.1006	0.08694	0.1065
Std. Dev.	0.02309	0.01972	0.1148	0.0025	0.02537	0.05242
Upper Lim.	0.14	0.12	0.24	0.11	0.1	0.1096
Lower Lim.	0.1	0.049	0.034	0.1	0.06	0.05787

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-49	PZ-37	YGWC-24SA	YGWC-36A
6/8/2016			<0.1	
8/1/2016			<0.1	
9/1/2016	0.09 (J)			
9/2/2016				0.05 (J)
9/20/2016			<0.1	
11/8/2016			<0.1	
11/14/2016				0.18 (J)
11/15/2016	0.16 (J)			
1/17/2017			<0.1	
2/27/2017	0.06 (J)			
2/28/2017				0.09 (J)
3/8/2017			<0.1	
5/2/2017			<0.1	
5/9/2017	0.05 (J)			0.009 (J)
7/7/2017			<0.1	
7/13/2017	<0.1			<0.1
9/22/2017				0.09 (J)
9/29/2017				<0.1
10/5/2017			<0.1	
10/6/2017				<0.1
10/11/2017	0.14 (J)			<0.1
10/12/2017		<0.1		
11/21/2017		0.26 (J)		
1/11/2018		<0.1		
2/20/2018		0.45		
3/30/2018			<0.1	<0.1
4/3/2018		0.31		
4/4/2018	<0.1			
6/12/2018			<0.1	
6/13/2018				<0.1
6/29/2018		<0.1		
8/6/2018		0.23 (J)		
9/20/2018	<0.1			
9/24/2018		<0.1		
9/26/2018			<0.1	<0.1
3/5/2019			<0.1	
3/6/2019				<0.1
3/28/2019	<0.1			
4/4/2019			0.033 (J)	0.043 (J)
9/26/2019	0.09 (J)		0.098 (J)	0.094 (J)
3/25/2020	<0.1			<0.1
3/26/2020			<0.1	
9/23/2020			<0.1	
9/24/2020	<0.1			
9/25/2020		<0.1		
10/7/2020				<0.1
2/9/2021	<0.1	<0.1	<0.1	
2/10/2021				<0.1
3/3/2021			<0.1	
3/4/2021	<0.1	<0.1		<0.1
8/25/2021		<0.1		
9/1/2021	<0.1		<0.1	

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-49	PZ-37	YGWC-24SA	YGWC-36A
9/3/2021				<0.1
Mean	0.09933	0.1708	0.09655	0.0928
Std. Dev.	0.02604	0.1163	0.01496	0.03214
Upper Lim.	0.14	0.31	0.1	0.1
Lower Lim.	0.09	0.1	0.098	0.09

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-2	YAMW-4	YAMW-5	YGWC-23S	YGWC-38
6/7/2016					0.00044 (J)	
7/28/2016					<0.001	
9/20/2016					<0.001	
11/8/2016					<0.001	
1/16/2017					<0.001	
3/9/2017					<0.001	
5/2/2017					<0.001	
7/10/2017					<0.001	
10/12/2017						0.0001 (J)
11/20/2017						0.0001 (J)
1/12/2018						0.0001 (J)
2/20/2018						<0.001
3/30/2018					<0.001	
4/3/2018						<0.001
6/28/2018						<0.001
8/7/2018						<0.001
9/24/2018						<0.001
3/6/2019					<0.001	
4/4/2019					<0.001	
8/22/2019						<0.001
9/26/2019	<0.001					
9/27/2019					0.00013 (J)	
10/9/2019						<0.001
3/25/2020	<0.001					<0.001
3/26/2020					<0.001	
9/23/2020		<0.001	0.00028 (J)			
9/24/2020	<0.001			0.00011 (J)	4.6E-05 (J)	
9/25/2020						<0.001
2/9/2021	0.00019 (J)	0.00011 (J)	0.00054 (J)	7.3E-05 (J)	<0.001	<0.001
3/3/2021	<0.001	8E-05 (J)	9.6E-05 (J)			
3/4/2021				4.1E-05 (J)	0.00021 (J)	<0.001
8/25/2021			<0.001		<0.001	
8/26/2021				<0.001		<0.001
9/1/2021	<0.001	<0.001				
Mean	0.000865	0.0005475	0.000479	0.000306	0.0008133	0.00082
Std. Dev.	0.0003307	0.0005226	0.0003922	0.0004635	0.0003546	0.0003726
Upper Lim.	0.001	0.001	0.0007189	0.0001563	0.001	0.001
Lower Lim.	0.00019	8E-05	-0.0001082	2.421E-05	0.00044	0.0001

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-41	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37
8/30/2016		<0.001				
8/31/2016			<0.001			
9/1/2016				<0.001		
11/15/2016				<0.001		
11/16/2016		0.0002 (J)	<0.001			
2/24/2017			<0.001			
2/27/2017		<0.001		<0.001		
5/9/2017				<0.001		
5/10/2017		9E-05 (J)	8E-05 (J)			
7/11/2017		<0.001	<0.001			
7/13/2017				<0.001		
10/11/2017				<0.001		
10/12/2017	<0.001	<0.001	<0.001			0.0002 (J)
11/21/2017	<0.001					0.0002 (J)
1/11/2018	7E-05 (J)					0.0001 (J)
2/19/2018	<0.001					
2/20/2018						<0.001
4/3/2018	<0.001					<0.001
4/4/2018		<0.001	<0.001	<0.001		
6/27/2018	0.0011 (J)					
6/29/2018						<0.001
8/6/2018						<0.001
8/7/2018	<0.001					
9/20/2018		<0.001	<0.001	<0.001		
9/24/2018	<0.001					<0.001
8/21/2019			<0.001			
8/22/2019	6.7E-05 (J)	<0.001				
9/26/2019				<0.001	<0.001	
10/9/2019	0.00012 (J)	<0.001	<0.001			
3/25/2020	<0.001	4.7E-05 (J)	7.5E-05 (J)	5.9E-05 (J)	<0.001	
9/24/2020		<0.001		<0.001	<0.001	
9/25/2020	<0.001		<0.001			8.5E-05 (J)
2/9/2021			<0.001	<0.001		8.8E-05 (J)
2/10/2021	0.0002 (J)	5.4E-05 (J)			8.7E-05 (J)	
3/4/2021	<0.001	<0.001	<0.001	<0.001	0.00015 (J)	<0.001
8/25/2021		<0.001				<0.001
8/26/2021	<0.001					
9/1/2021				<0.001	<0.001	
9/27/2021			<0.001			
Mean	0.0007705	0.0007594	0.000877	0.0009328	0.0007062	0.0006394
Std. Dev.	0.0004114	0.0004143	0.0003246	0.0002515	0.0004556	0.0004471
Upper Lim.	0.0011	0.001	0.001	0.001	0.001	0.001
Lower Lim.	0.00012	9E-05	8E-05	5.9E-05	8.7E-05	8.8E-05

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-24SA	YGWC-36A
6/8/2016	<0.001	
8/1/2016	<0.001	
9/2/2016		0.0017 (J)
9/20/2016	<0.001	
11/8/2016	<0.001	
11/14/2016		0.0002 (J)
1/17/2017	<0.001	
2/28/2017		0.0003 (J)
3/8/2017	<0.001	
5/2/2017	<0.001	
5/9/2017		0.0004 (J)
7/7/2017	<0.001	
7/13/2017		0.0004 (J)
9/22/2017		0.0003 (J)
9/29/2017		0.0002 (J)
10/6/2017		0.0002 (J)
3/30/2018	<0.001	<0.001
3/5/2019	<0.001	
3/6/2019		<0.001
4/4/2019	<0.001	0.00037 (J)
9/26/2019	<0.001	0.00023 (J)
3/25/2020		0.0001 (J)
3/26/2020	5.3E-05 (J)	
9/23/2020	<0.001	
10/7/2020		0.00077 (J)
2/9/2021	0.00036 (J)	
2/10/2021		0.00051 (J)
3/3/2021	<0.001	
3/4/2021		0.00025 (J)
9/1/2021	<0.001	
9/3/2021		<0.001
Mean	0.0009066	0.0005253
Std. Dev.	0.0002691	0.0004283
Upper Lim.	0.001	0.0005018
Lower Lim.	0.00036	0.0001591

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				<0.03		
7/28/2016				0.0019 (J)		
9/20/2016				0.0021 (J)		
11/8/2016				0.0024 (J)		
1/16/2017				0.0022 (J)		
3/9/2017				0.0025 (J)		
5/2/2017				0.0019 (J)		
7/10/2017				0.0018 (J)		
10/12/2017					0.0095 (J)	0.004 (J)
11/20/2017					0.0083 (J)	
11/21/2017						0.0043 (J)
1/11/2018						0.0044 (J)
1/12/2018					0.0089 (J)	
2/19/2018						<0.03
2/20/2018					0.0082 (J)	
3/30/2018				0.0039 (J)		
4/3/2018					0.0097 (J)	0.0047 (J)
6/12/2018				0.0017 (J)		
6/27/2018						0.0042 (J)
6/28/2018					0.0093 (J)	
8/7/2018					0.0092 (J)	0.0038 (J)
9/24/2018					0.0083 (J)	0.0037 (J)
9/27/2018				0.0017 (J)		
10/16/2018	0.0052 (J)					
3/6/2019				0.0025 (J)		
4/4/2019				0.0018 (J)		
8/22/2019					0.0082 (J)	0.0035 (J)
9/26/2019	<0.03					
9/27/2019				0.0017 (J)		
10/9/2019					0.0081 (J)	0.0032 (J)
3/25/2020	0.0011 (J)				0.0081 (J)	0.0029 (J)
3/26/2020				0.0021 (J)		
9/23/2020		0.03 (J)				
9/24/2020	0.011 (J)		0.013 (J)	0.0035 (J)		
9/25/2020					0.0069 (J)	0.0025 (J)
2/9/2021	0.021 (J)	0.018 (J)	0.016 (J)	0.0026 (J)	0.0067 (J)	
2/10/2021						0.0021 (J)
3/3/2021	0.022 (J)	0.02 (J)				
3/4/2021			0.016 (J)	0.0026 (J)	0.0067 (J)	0.0021 (J)
8/25/2021		0.033		0.0026 (J)		
8/26/2021			0.015 (J)		0.007 (J)	0.0021 (J)
9/1/2021	0.013 (J)					
Mean	0.01261	0.02525	0.015	0.002974	0.008207	0.004167
Std. Dev.	0.007686	0.007365	0.001414	0.002972	0.001011	0.003124
Upper Lim.	0.02174	0.04197	0.01821	0.0026	0.008892	0.0044
Lower Lim.	0.003485	0.008528	0.01179	0.0018	0.007522	0.0021

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-36A
8/30/2016	0.0257 (J)					
8/31/2016		0.006 (J)				
9/1/2016			0.0034 (J)			
9/2/2016						0.0029 (J)
11/14/2016						0.0044 (J)
11/15/2016			0.0044 (J)			
11/16/2016	0.0221 (J)	0.0095 (J)				
2/24/2017		0.0104 (J)				
2/27/2017	0.0208 (J)		0.0036 (J)			
2/28/2017						0.0038 (J)
5/9/2017			0.0038 (J)			0.0057 (J)
5/10/2017	0.0316 (J)	0.0123 (J)				
7/11/2017	0.0281 (J)	0.0131 (J)				
7/13/2017			0.0036 (J)			0.007 (J)
9/22/2017						0.0067 (J)
9/29/2017						0.0064 (J)
10/6/2017						0.0065 (J)
10/11/2017			0.0036 (J)			
10/12/2017	0.0331 (J)	0.013 (J)			0.0271 (J)	
11/21/2017					0.0255 (J)	
1/11/2018					0.0271 (J)	
2/20/2018					<0.03	
3/30/2018						0.0061 (J)
4/3/2018					0.027 (J)	
4/4/2018	0.037 (J)	0.016 (J)	0.0039 (J)			
6/13/2018						0.0065 (J)
6/29/2018					0.032 (J)	
8/6/2018					0.033 (J)	
9/20/2018	0.049 (J)	0.019 (J)	0.0036 (J)			
9/24/2018					0.028 (J)	
9/26/2018						0.0063 (J)
10/16/2018				0.0011 (J)		
3/6/2019						0.0057 (J)
4/4/2019						0.0058 (J)
8/21/2019		0.015 (J)				
8/22/2019	0.047					
9/26/2019			0.0036 (J)	<0.03		0.0041 (J)
10/9/2019	0.037	0.018 (J)				
3/25/2020	0.045	0.016 (J)	0.0037 (J)	0.011 (J)		0.0032 (J)
9/24/2020	0.05		0.0037 (J)	0.001 (J)		
9/25/2020		0.018 (J)			0.028 (J)	
10/7/2020						0.0014 (J)
2/9/2021		0.024 (J)	0.0038 (J)		0.024 (J)	
2/10/2021	0.058			0.0012 (J)		0.0011 (J)
3/4/2021	0.059	0.025 (J)	0.0035 (J)	0.0015 (J)	0.028 (J)	<0.03
8/25/2021	0.053				0.023 (J)	
9/1/2021			0.0036 (J)	0.0019 (J)		
9/3/2021						0.00086 (J)
9/27/2021		0.0092 (J)				
Mean	0.03976	0.01497	0.0037	0.004671	0.02647	0.005235
Std. Dev.	0.01276	0.005331	0.0002386	0.005813	0.004592	0.003095
Upper Lim.	0.04841	0.01858	0.0039	0.015	0.03008	0.006697

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-43	YGWC-49	PZ-35	PZ-37	YGWC-36A
Lower Lim.	0.03111	0.01135	0.0035	0.001	0.02287	0.003217

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-23S	YGWC-38	YGWC-41	YGWC-42	YGWC-43	YGWC-49
6/7/2016	9.8E-05 (J)					
7/28/2016	<0.0002					
8/30/2016				<0.0002		
8/31/2016					<0.0002	
9/1/2016						<0.0002
9/20/2016	<0.0002					
11/8/2016	<0.0002					
11/15/2016						<0.0002
11/16/2016				<0.0002	<0.0002	
1/16/2017	<0.0002					
2/24/2017					<0.0002	
2/27/2017				<0.0002		<0.0002
3/9/2017	<0.0002					
5/2/2017	<0.0002					
5/9/2017						<0.0002
5/10/2017				<0.0002	<0.0002	
7/10/2017	<0.0002					
7/11/2017				<0.0002	<0.0002	
7/13/2017						<0.0002
10/11/2017						<0.0002
10/12/2017		<0.0002	<0.0002	<0.0002	<0.0002	
11/20/2017		8E-05 (J)				
11/21/2017			6E-05 (J)			
1/11/2018			<0.0002			
1/12/2018		<0.0002				
2/19/2018			<0.0002			
2/20/2018		<0.0002				
3/30/2018	<0.0002					
4/3/2018		<0.0002	<0.0002			
4/4/2018				<0.0002	<0.0002	<0.0002
6/27/2018			<0.0002			
6/28/2018		3.7E-05 (J)				
8/7/2018		<0.0002	<0.0002			
9/20/2018				4.8E-05 (J)	5.2E-05 (J)	6.1E-05 (J)
9/24/2018		<0.0002	<0.0002			
9/27/2018	<0.0002					
3/6/2019	<0.0002					
8/21/2019					<0.0002	
8/22/2019		<0.0002	<0.0002	<0.0002		
2/9/2021	0.00015 (J)	<0.0002			<0.0002	0.00014 (J)
2/10/2021			<0.0002	<0.0002		
3/4/2021	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
8/25/2021	<0.0002			<0.0002		
8/26/2021		<0.0002	<0.0002			
9/1/2021						<0.0002
9/27/2021					9E-05 (JB)	
Mean	0.0001891	0.0001764	0.0001883	0.0001873	0.0001785	0.0001819
Std. Dev.	2.942E-05	5.584E-05	4.041E-05	4.388E-05	5.086E-05	4.396E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Lower Lim.	0.00015	8E-05	6E-05	4.8E-05	9E-05	0.00014

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	PZ-37
10/12/2017	<0.0002
11/21/2017	6E-05 (J)
1/11/2018	<0.0002
2/20/2018	<0.0002
4/3/2018	<0.0002
6/29/2018	<0.0002
8/6/2018	<0.0002
9/24/2018	<0.0002
9/25/2020	<0.0002
2/9/2021	<0.0002
3/4/2021	<0.0002
8/25/2021	<0.0002
Mean	0.0001883
Std. Dev.	4.041E-05
Upper Lim.	0.0002
Lower Lim.	6E-05

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YGWC-42	YGWC-43	YGWC-49	PZ-35
8/30/2016			0.0019 (J)			
8/31/2016				0.0022 (J)		
9/1/2016					<0.01	
11/15/2016					<0.01	
11/16/2016			0.0027 (J)	<0.01		
2/24/2017				<0.01		
2/27/2017			0.0031 (J)		0.0007 (J)	
5/9/2017					<0.01	
5/10/2017			0.0017 (J)	<0.01		
7/11/2017			0.0014 (J)	<0.01		
7/13/2017					<0.01	
10/11/2017					<0.01	
10/12/2017			<0.01	<0.01		
4/4/2018			<0.01	<0.01	<0.01	
9/20/2018			<0.01	<0.01	<0.01	
8/21/2019				0.0012 (J)		
8/22/2019			<0.01			
10/9/2019			<0.01	0.0012 (J)		
3/25/2020	<0.01		<0.01	0.0015 (J)	<0.01	0.0019 (J)
9/23/2020		0.0068 (J)				
9/24/2020	0.0022 (J)		0.00091 (J)		<0.01	<0.01
9/25/2020				0.0011 (J)		
2/9/2021	0.0038 (J)	0.0068 (J)		0.0012 (J)	<0.01	
2/10/2021			0.00094 (J)			<0.01
3/3/2021	0.0037 (J)	0.0049 (J)				
3/4/2021			0.00085 (J)	0.0011 (J)	<0.01	<0.01
8/25/2021		0.0081 (J)	0.00078 (J)			
9/1/2021	0.0014 (J)				<0.01	<0.01
9/27/2021				0.0062 (J)		
Mean	0.00422	0.00665	0.004952	0.005713	0.009285	0.00838
Std. Dev.	0.003387	0.001318	0.004314	0.004331	0.002579	0.003622
Upper Lim.	0.004477	0.009642	0.01	0.01	0.01	0.01
Lower Lim.	0.001073	0.003658	0.00091	0.0012	0.0007	0.0019

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	PZ-37	YGWC-36A
9/2/2016		0.0027 (J)
11/14/2016		0.0071 (J)
2/28/2017		0.0038 (J)
5/9/2017		0.0025 (J)
7/13/2017		0.0014 (J)
9/22/2017		<0.01
9/29/2017		<0.01
10/6/2017		<0.01
10/12/2017	0.0022 (J)	
11/21/2017	0.0016 (J)	
1/11/2018	0.0015 (J)	
2/20/2018	<0.01	
3/30/2018		<0.01
4/3/2018	<0.01	
6/29/2018	0.0021 (J)	
8/6/2018	<0.01	
9/24/2018	<0.01	
3/6/2019		<0.01
3/25/2020		<0.01
9/25/2020	0.0016 (J)	
10/7/2020		0.0015 (J)
2/9/2021	0.0016 (J)	
2/10/2021		<0.01
3/4/2021	0.0024 (J)	<0.01
8/25/2021	0.0011 (J)	
9/3/2021		<0.01
Mean	0.004508	0.007267
Std. Dev.	0.00407	0.003689
Upper Lim.	0.01	0.01
Lower Lim.	0.0015	0.0025

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YAMW-1	YAMW-4	YAMW-5	YGWC-23S	YGWC-38	YGWC-41
6/7/2016				0.037		
7/28/2016				0.0385		
9/20/2016				0.0464		
11/8/2016				0.0521		
1/16/2017				0.0469		
3/9/2017				0.0437		
5/2/2017				0.0395		
7/10/2017				0.0386		
10/12/2017					0.265	0.0191
11/20/2017					0.246	
11/21/2017						0.0687
1/11/2018						0.069
1/12/2018					0.249	
2/19/2018						0.071
2/20/2018					0.253	
3/30/2018				0.028		
4/3/2018					0.23	0.067
6/12/2018				0.026		
6/27/2018						0.066
6/28/2018					0.23	
8/7/2018					0.2	0.061
9/24/2018					0.2	0.061
9/27/2018				0.023		
10/16/2018	0.0019 (J)					
3/6/2019				0.019		
4/4/2019				0.017		
8/22/2019					0.14	0.058
9/26/2019	<0.005					
9/27/2019				0.018		
10/9/2019					0.12	0.052
1/15/2020			0.045			
1/16/2020		0.0018 (J)				
3/25/2020	<0.005				0.099	0.057
3/26/2020				0.024		
9/23/2020		0.016				
9/24/2020	<0.005		0.026	0.031		
9/25/2020					0.076	0.046
2/9/2021	<0.005	<0.005	0.06	0.032	0.073	
2/10/2021						0.033
3/3/2021	<0.005	<0.005				
3/4/2021			0.061	0.037	0.076	0.037
8/25/2021		0.019		0.032		
8/26/2021			0.055		0.06	0.027
9/1/2021	0.0027 (J)					
Mean	0.004229	0.00936	0.0494	0.03314	0.1678	0.05285
Std. Dev.	0.001338	0.007619	0.01454	0.01034	0.07768	0.01667
Upper Lim.	0.005	0.02107	0.07376	0.0392	0.249	0.06415
Lower Lim.	0.0019	-0.004906	0.02504	0.02709	0.076	0.04156

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 11/19/2021 9:56 AM View: Appendix IV

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

	YGWC-42	YGWC-49	PZ-35	PZ-37	YGWC-36A
8/30/2016	0.0711				
9/1/2016		0.0086 (J)			
9/2/2016					0.0012 (J)
11/14/2016					<0.005
11/15/2016		0.0056 (J)			
11/16/2016	0.0313				
2/27/2017	0.0316	0.0098 (J)			
2/28/2017					0.0017 (J)
5/9/2017		0.0076 (J)			0.0018 (J)
5/10/2017	0.053				
7/11/2017	0.0697				
7/13/2017		0.0093 (J)			0.0031 (J)
9/22/2017					0.0024 (J)
9/29/2017					0.002 (J)
10/6/2017					<0.005
10/11/2017		0.0089 (J)			
10/12/2017	0.0594			0.234	
11/21/2017				0.225	
1/11/2018				0.168	
2/20/2018				0.315	
3/30/2018					<0.005
4/3/2018				0.28	
4/4/2018	0.055	<0.005			
6/13/2018					0.0024 (J)
6/29/2018				0.26	
8/6/2018				0.21	
9/20/2018	0.041	0.0081 (J)			
9/24/2018				0.33	
9/26/2018					0.0037 (J)
10/16/2018			<0.005		
3/6/2019					0.0033 (J)
4/4/2019					0.0029 (J)
8/22/2019	0.047				
9/26/2019		0.0077 (J)	<0.005		0.0019 (J)
10/9/2019	0.042				
3/25/2020	0.046	0.0085 (J)	<0.005		0.0024 (J)
9/24/2020	0.046	0.0091 (J)	<0.005		
9/25/2020				0.32	
10/7/2020					<0.005
2/9/2021		0.0079 (J)		0.28	
2/10/2021	0.043		<0.005		<0.005
3/4/2021	0.048	0.0058	<0.005	0.27	<0.005
8/25/2021	0.043			0.2	
9/1/2021		0.0066	0.0016 (J)		
9/3/2021					<0.005
Mean	0.04847	0.00775	0.004514	0.2577	0.003358
Std. Dev.	0.01164	0.001481	0.001285	0.05119	0.001411
Upper Lim.	0.05636	0.008799	0.005	0.2978	0.005
Lower Lim.	0.04059	0.006701	0.0016	0.2175	0.0019

FIGURE J.

Appendix IV Trend Tests - Significant Results

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 1:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	**YGWA-20S (bg)**	**-0.0005785**	**-104**	**-81**	**Yes**	**20**	**50**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	**YGWC-38**	**-0.0007794**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-18I (bg)**	**-0.0004282**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-39 (bg)**	**0.001331**	**86**	**58**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWC-42**	**0.007174**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-47 (bg)**	**-0.0004228**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-30I (bg)**	**-0.009773**	**-86**	**-81**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3D (bg)**	**0.000976**	**99**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3I (bg)**	**0.001062**	**88**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWA-17S (bg)**	**0.0007074**	**88**	**74**	**Yes**	**19**	**68.42**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWC-38**	**-0.05831**	**-94**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix IV Trend Tests - All Results

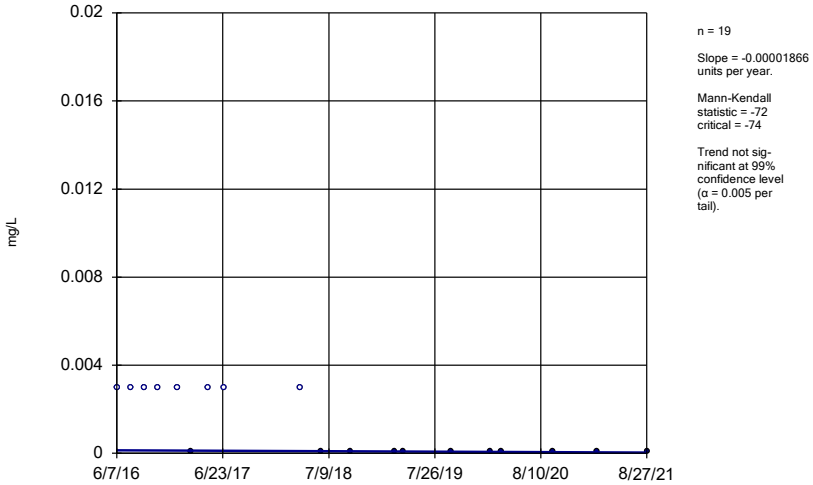
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6 Printed 10/29/2021, 1:01 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Beryllium (mg/L)	YGWA-17S (bg)	-0.00001866	-72	-74	No	19	42.11	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-18I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-18S (bg)	-0.0006066	-62	-81	No	20	45	n/a	n/a	0.01	NP
Beryllium (mg/L)	**YGWA-20S (bg)**	**-0.0005785**	**-104**	**-81**	**Yes**	**20**	**50**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	YGWA-21I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-39 (bg)	0	-11	-58	No	16	93.75	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-40 (bg)	-0.00001614	-30	-58	No	16	12.5	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-4I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-5D (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-5I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	**YGWC-38**	**-0.0007794**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Beryllium (mg/L)	YGWA-47 (bg)	0	-16	-43	No	13	69.23	n/a	n/a	0.01	NP
Beryllium (mg/L)	GWA-2 (bg)	0	0	191	No	36	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-14S (bg)	-0.000002446	-33	-68	No	18	11.11	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-1D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-1I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-2I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-30I (bg)	0	-15	-68	No	18	88.89	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-3D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Beryllium (mg/L)	YGWA-3I (bg)	0	-11	-68	No	18	94.44	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-17S (bg)	0	-3	-74	No	19	89.47	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-18I (bg)**	**-0.0004282**	**-133**	**-81**	**Yes**	**20**	**5**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	YGWA-18S (bg)	-0.0002108	-41	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-20S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-21I (bg)	0.00016	39	81	No	20	5	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-39 (bg)**	**0.001331**	**86**	**58**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	YGWA-40 (bg)	0	0	58	No	16	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-4I (bg)	-0.000182	-32	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-5D (bg)	0.0002654	63	81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-5I (bg)	0	-2	-81	No	20	10	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWC-42**	**0.007174**	**82**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-47 (bg)**	**-0.0004228**	**-65**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	GWA-2 (bg)	-0.0004067	-22	-53	No	15	40	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-14S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-1D (bg)	-0.0006682	-41	-81	No	20	0	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-1I (bg)	0	-31	-81	No	20	15	n/a	n/a	0.01	NP
Lithium (mg/L)	YGWA-2I (bg)	-0.0002795	-42	-81	No	20	10	n/a	n/a	0.01	NP
Lithium (mg/L)	**YGWA-30I (bg)**	**-0.009773**	**-86**	**-81**	**Yes**	**20**	**45**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3D (bg)**	**0.000976**	**99**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Lithium (mg/L)	**YGWA-3I (bg)**	**0.001062**	**88**	**81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	**YGWA-17S (bg)**	**0.0007074**	**88**	**74**	**Yes**	**19**	**68.42**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-18I (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-18S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-20S (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-21I (bg)	0	35	81	No	20	90	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-39 (bg)	0	1	58	No	16	93.75	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-40 (bg)	-0.0006615	-31	-58	No	16	37.5	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-4I (bg)	0	1	81	No	20	90	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-5D (bg)	0	0	81	No	20	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-5I (bg)	0	17	81	No	20	95	n/a	n/a	0.01	NP
Selenium (mg/L)	**YGWC-38**	**-0.05831**	**-94**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Selenium (mg/L)	YGWA-47 (bg)	0	15	34	No	11	81.82	n/a	n/a	0.01	NP
Selenium (mg/L)	GWA-2 (bg)	0	0	191	No	36	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-14S (bg)	0	55	68	No	18	72.22	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-1D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-1I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-2I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-30I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-3D (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	YGWA-3I (bg)	0	0	68	No	18	100	n/a	n/a	0.01	NP
Selenium (mg/L)	PZ-37	0.005682	5	38	No	12	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 19

Slope = -0.00001866 units per year.

Mann-Kendall statistic = -72
critical = -74

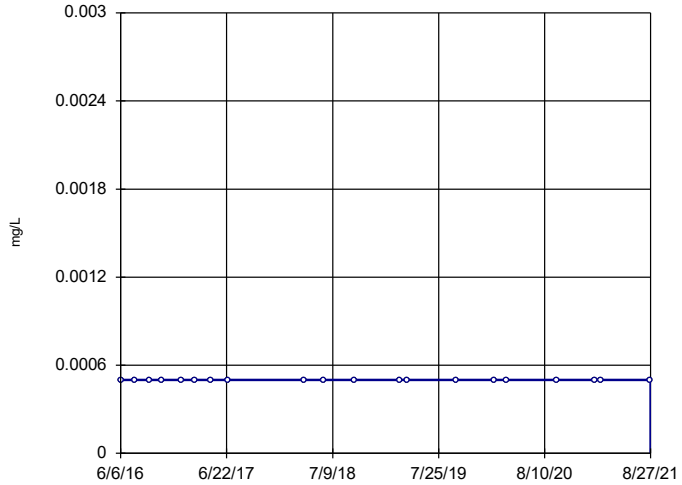
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

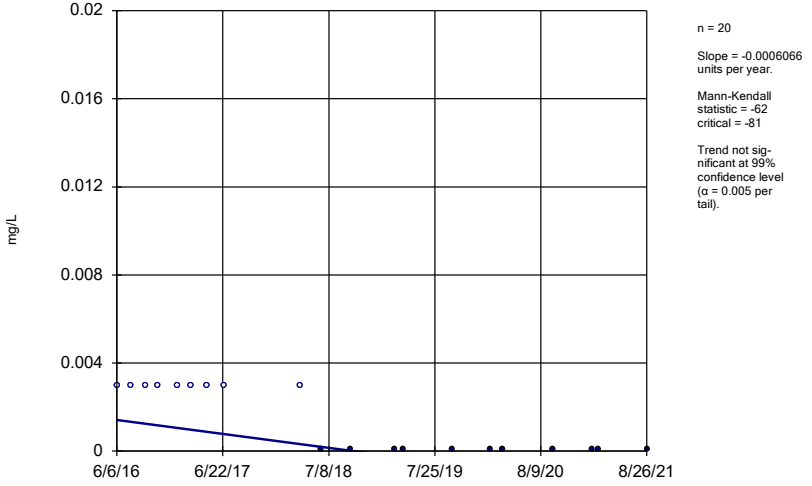
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 20

Slope = -0.0006066 units per year.

Mann-Kendall statistic = -62
critical = -81

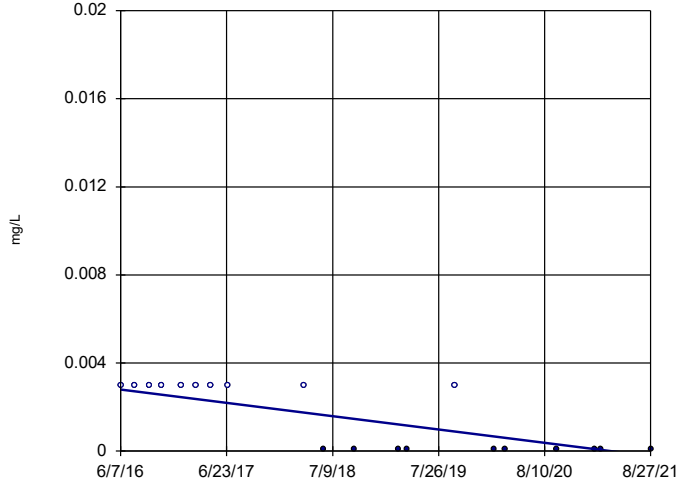
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 20

Slope = -0.0005785 units per year.

Mann-Kendall statistic = -104
critical = -81

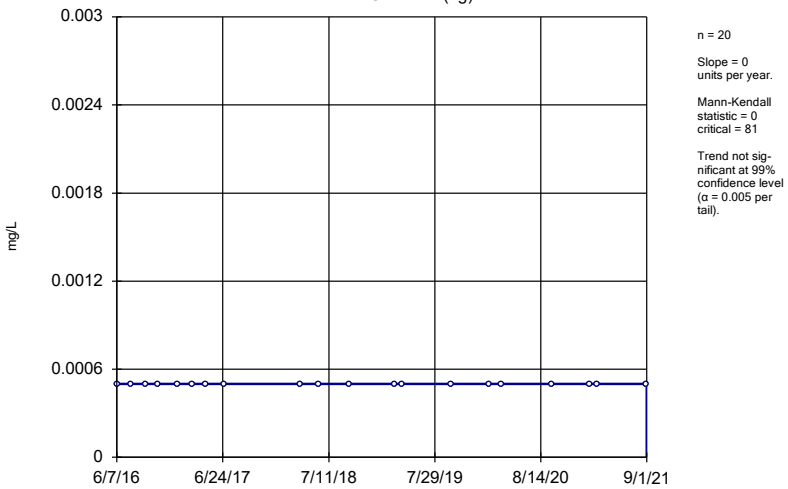
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

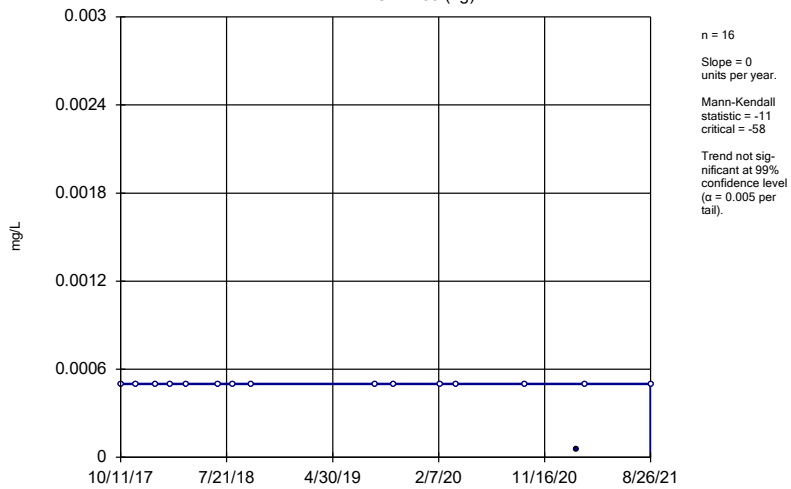
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = -11
critical = -58

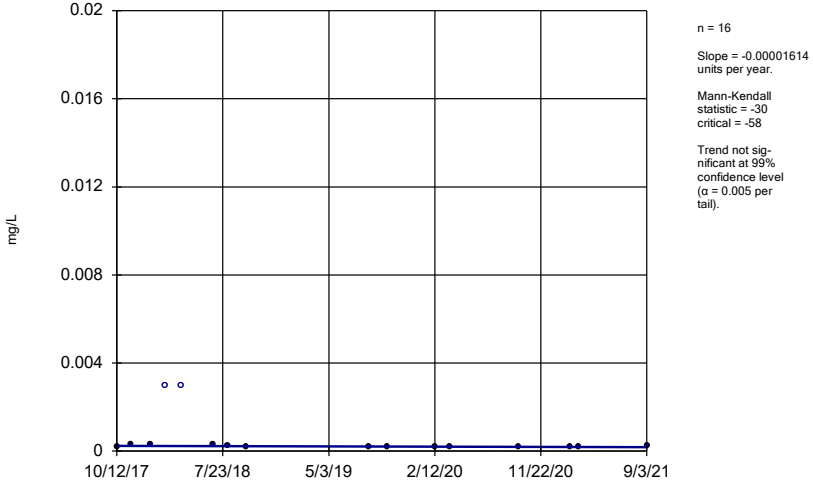
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 16

Slope = -0.00001614 units per year.

Mann-Kendall statistic = -30
critical = -58

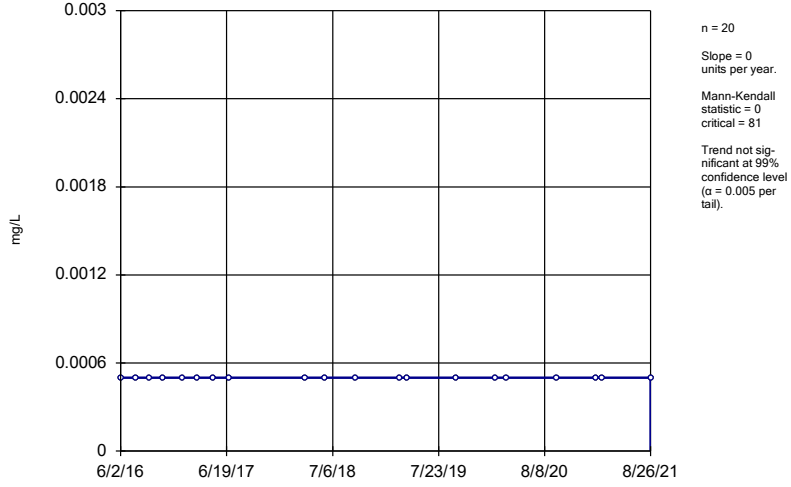
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

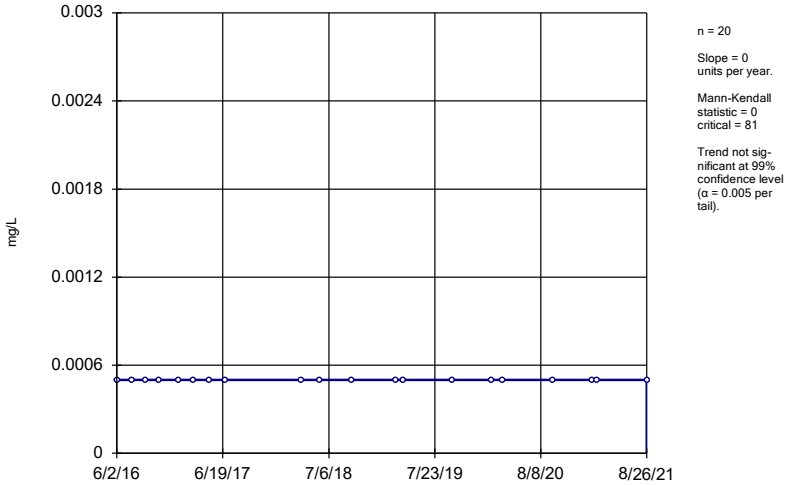
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

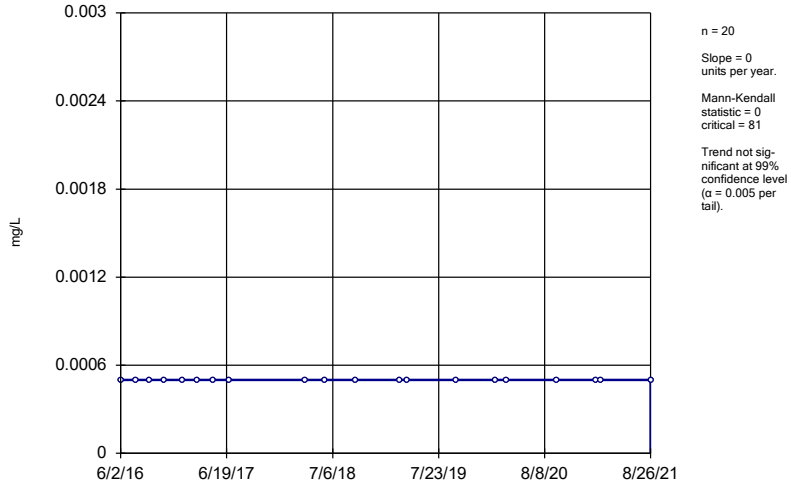
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

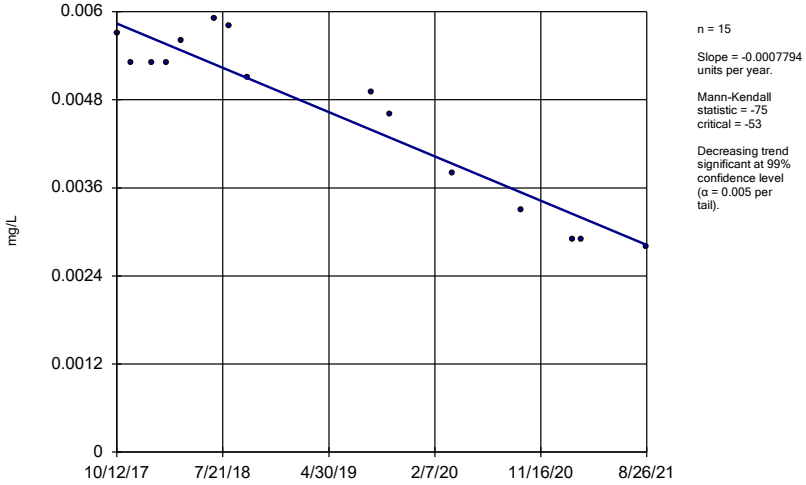
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 15

Slope = -0.0007794 units per year.

Mann-Kendall statistic = -75
critical = -53

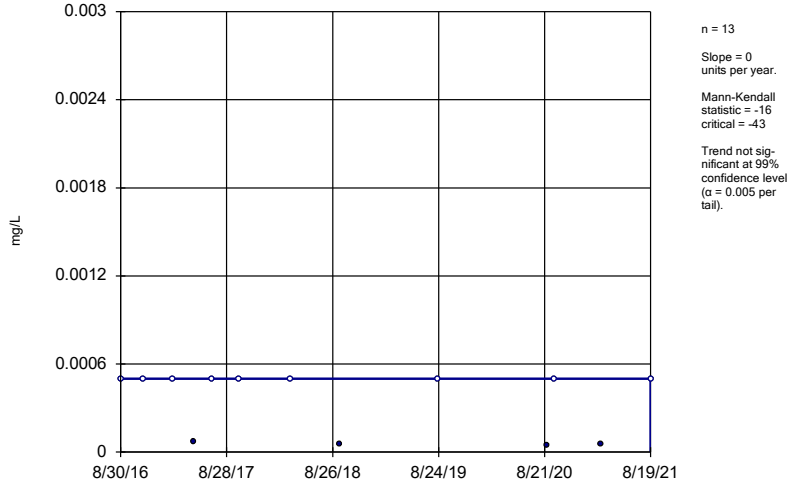
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 13

Slope = 0 units per year.

Mann-Kendall statistic = -16
critical = -43

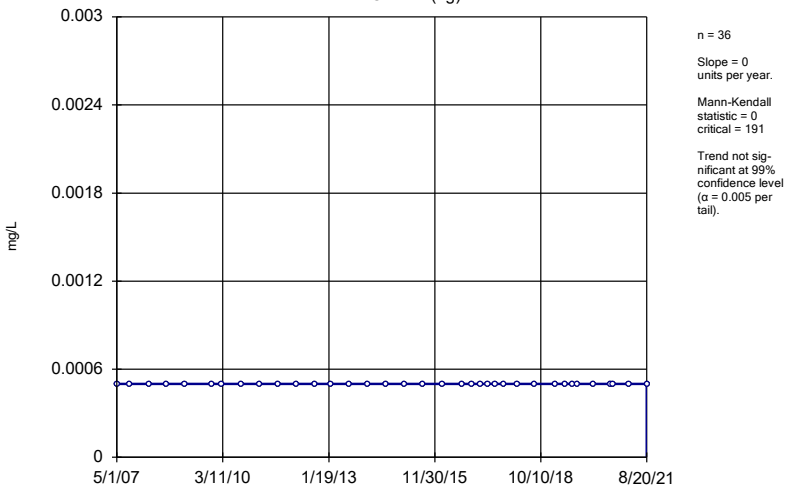
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 36

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 191

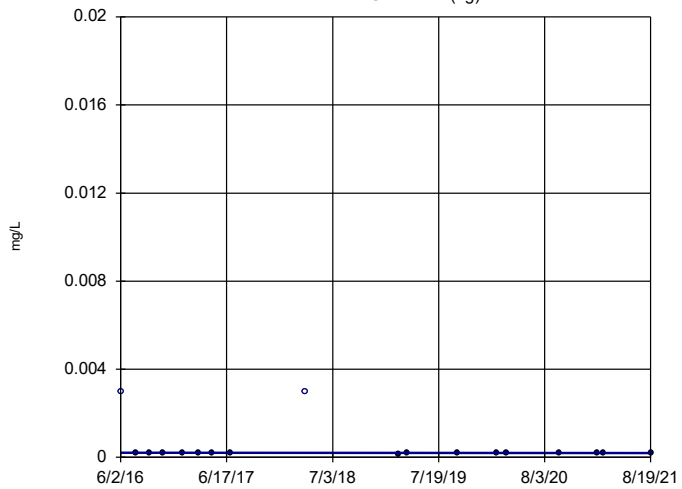
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 18

Slope = -0.000002446 units per year.

Mann-Kendall statistic = -33
critical = -68

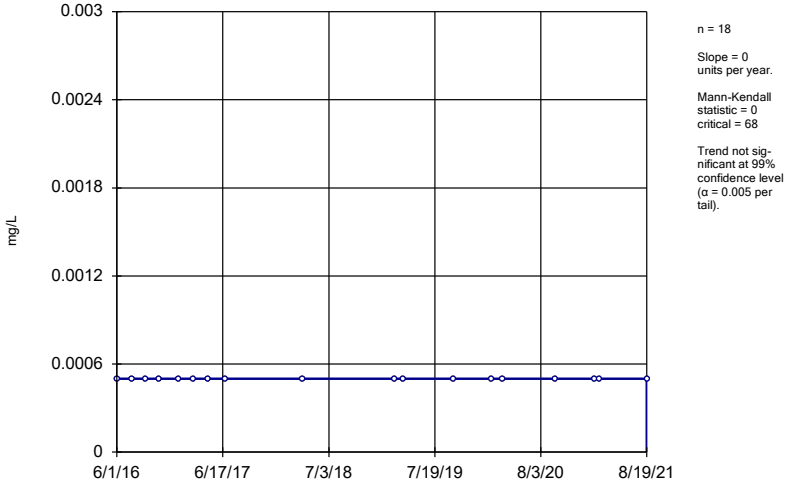
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

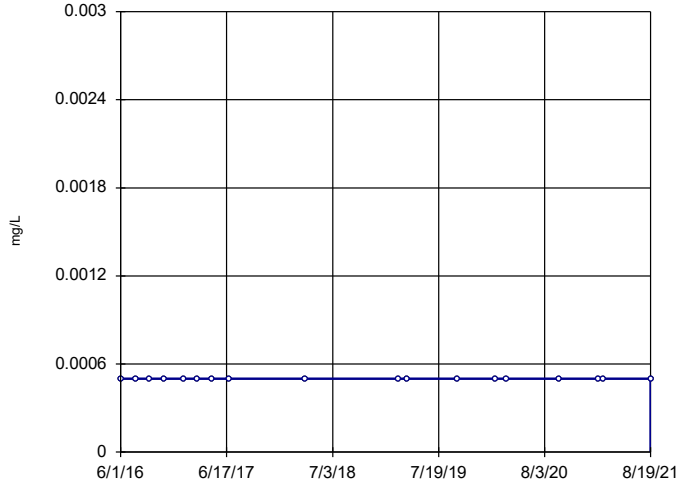
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

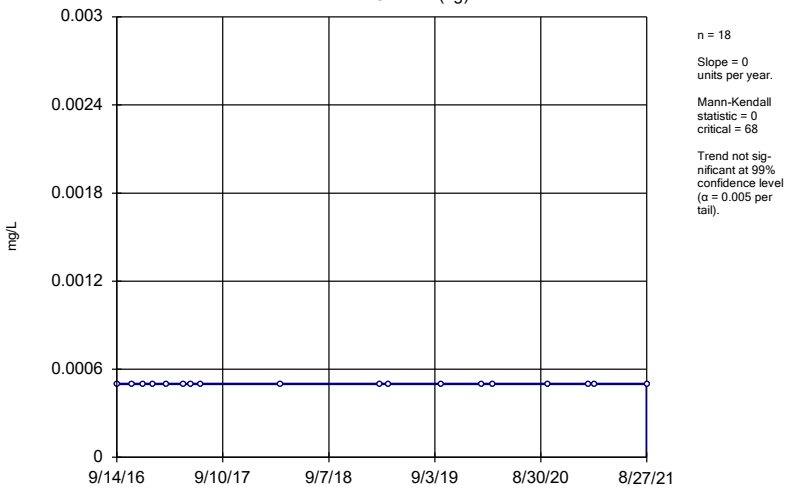
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)

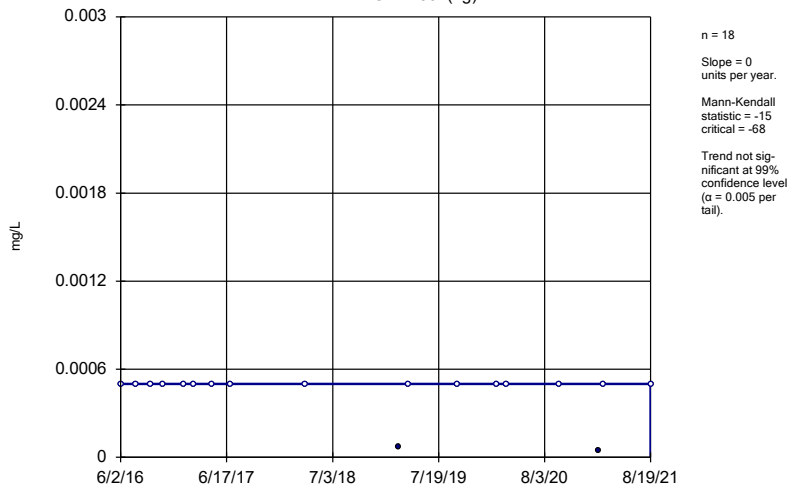


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)

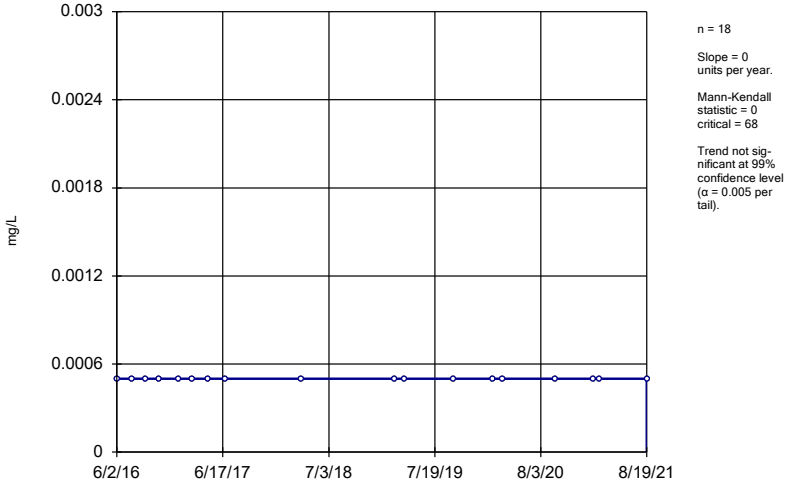


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)

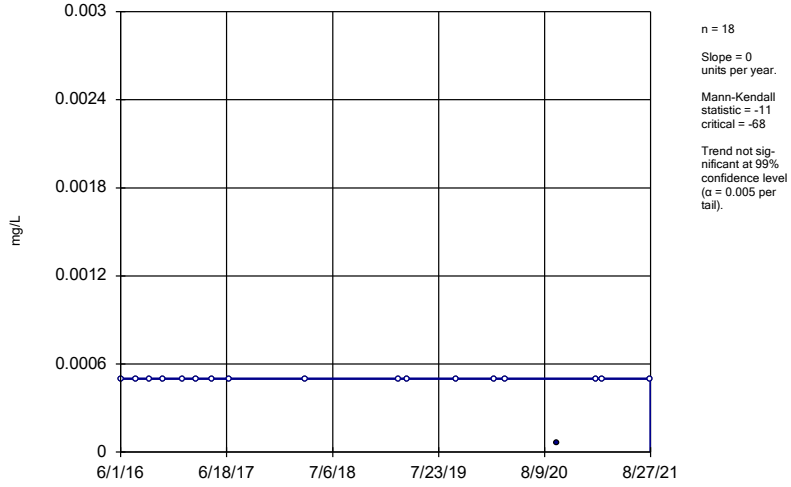


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)

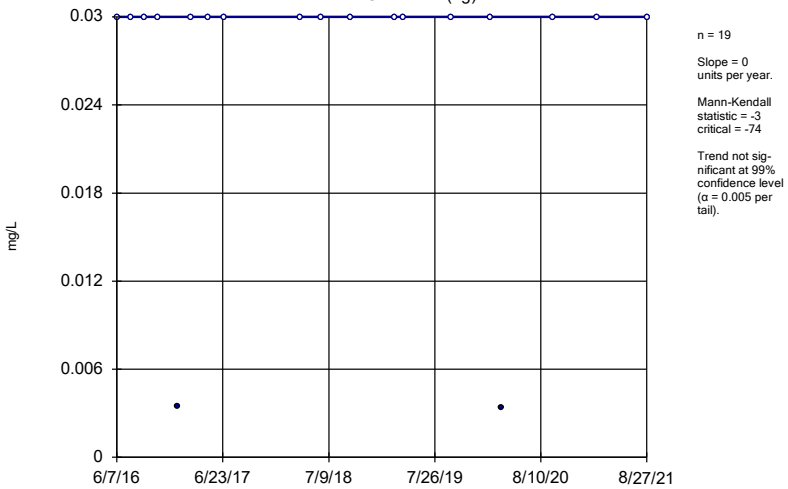


Constituent: Beryllium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 19

Slope = 0
units per year.

Mann-Kendall
statistic = -3
critical = -74

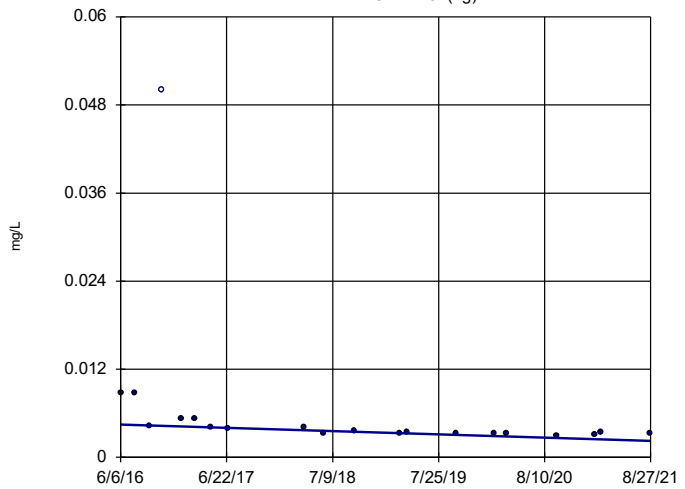
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 20

Slope = -0.0004282
units per year.

Mann-Kendall
statistic = -133
critical = -81

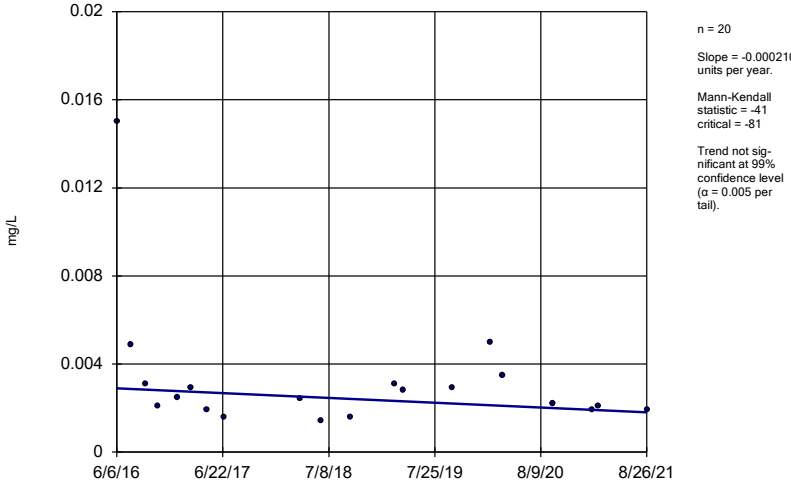
Decreasing trend
significant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-18S (bg)



n = 20

Slope = -0.0002108
units per year.

Mann-Kendall
statistic = -41
critical = -81

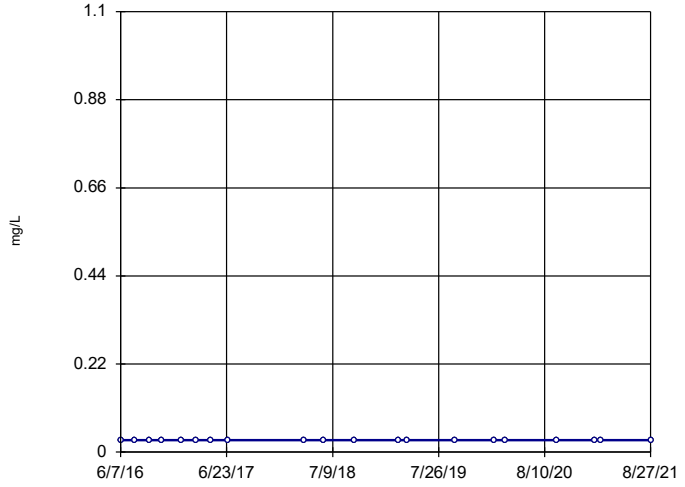
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 20

Slope = 0
units per year.

Mann-Kendall
statistic = 0
critical = 81

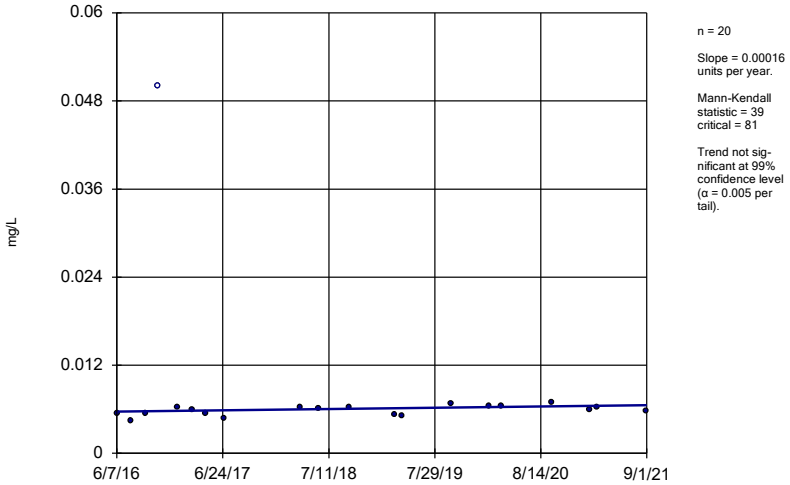
Trend not sig-
nificant at 99%
confidence level
(α = 0.005 per
tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 20

Slope = 0.00016 units per year.

Mann-Kendall statistic = 39
critical = 81

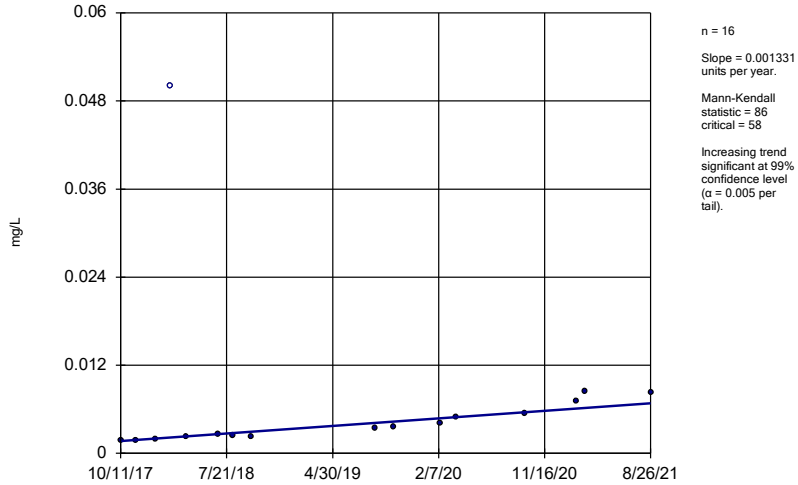
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 16

Slope = 0.001331 units per year.

Mann-Kendall statistic = 86
critical = 58

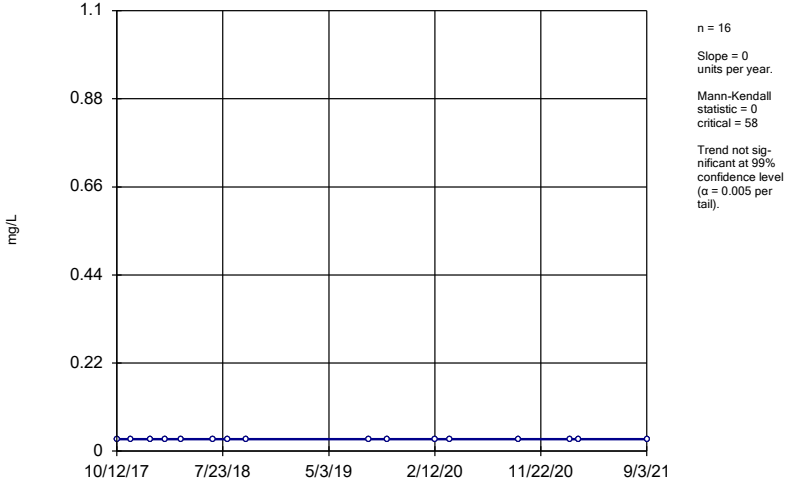
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 58

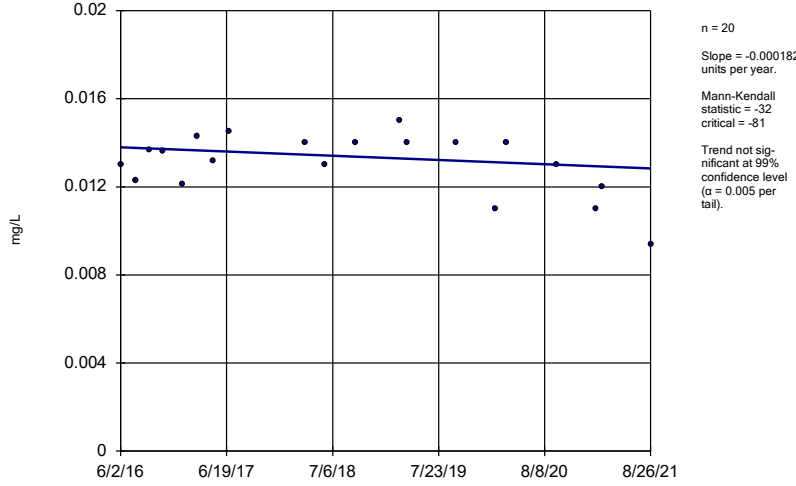
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-4I (bg)



n = 20

Slope = -0.000182 units per year.

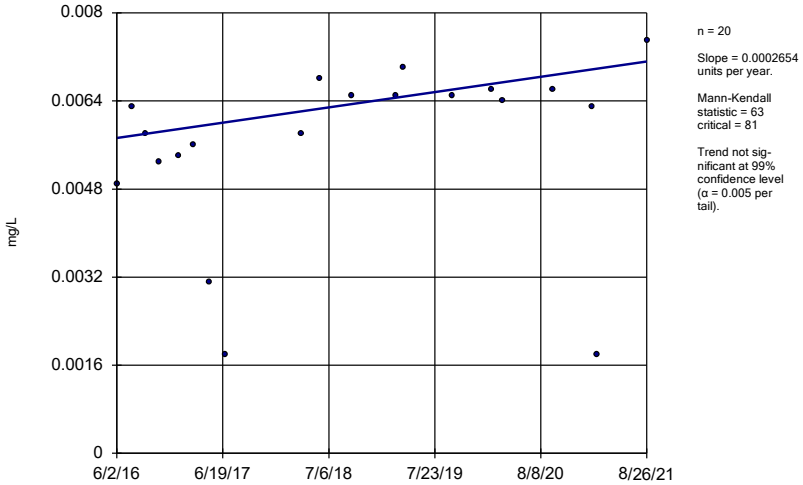
Mann-Kendall statistic = -32
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-5D (bg)



n = 20

Slope = 0.0002654 units per year.

Mann-Kendall statistic = 63
critical = 81

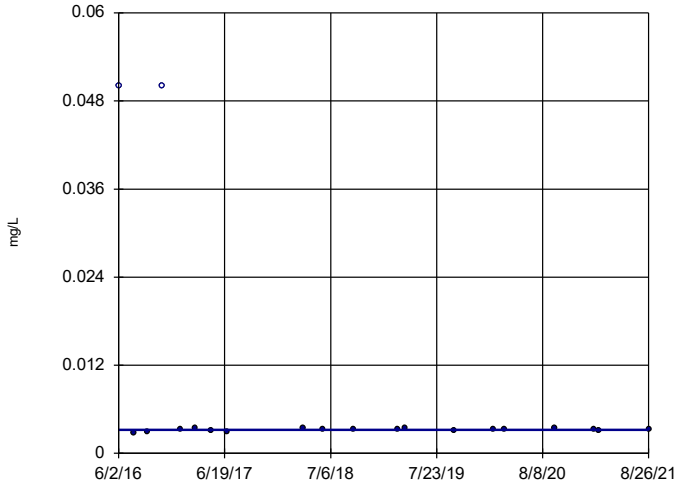
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 20

Slope = 0 units per year.

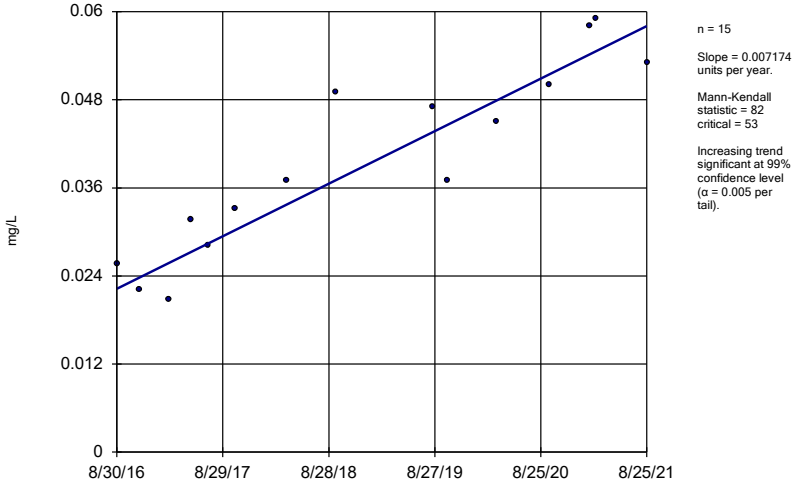
Mann-Kendall statistic = -2
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWC-42



n = 15

Slope = 0.007174 units per year.

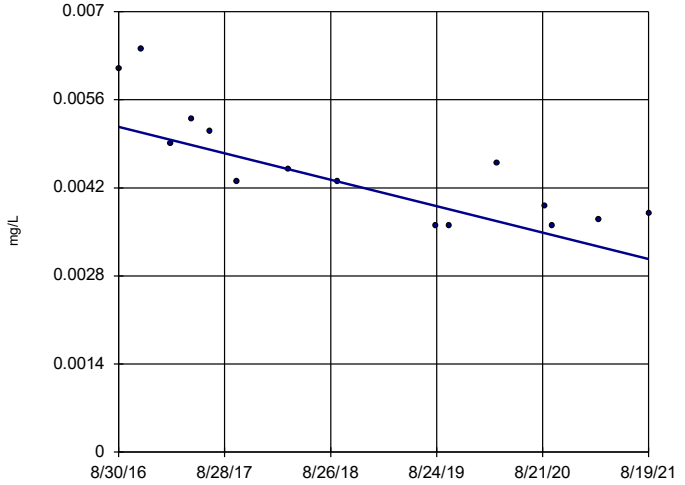
Mann-Kendall statistic = 82
critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

YGWA-47 (bg)



n = 15

Slope = -0.0004228 units per year.

Mann-Kendall statistic = -65
critical = -53

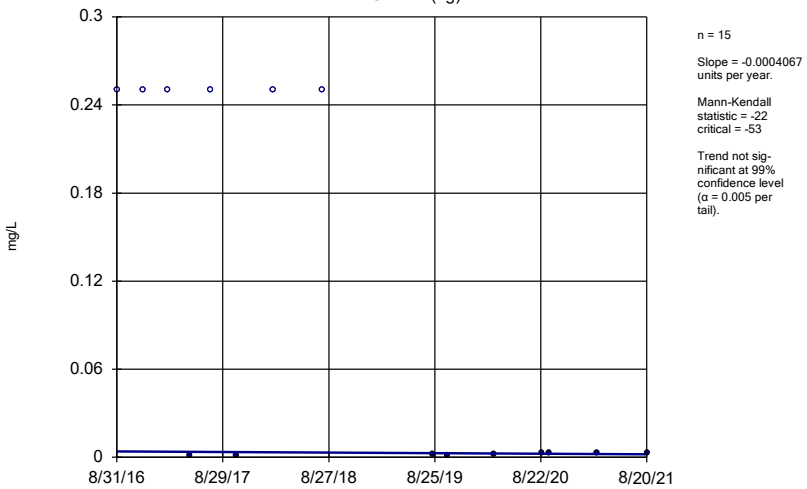
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 15

Slope = -0.0004067 units per year.

Mann-Kendall statistic = -22
critical = -53

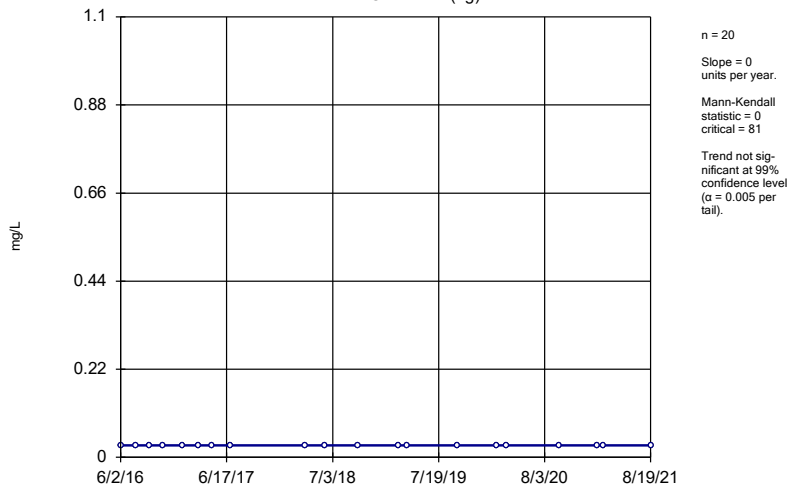
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

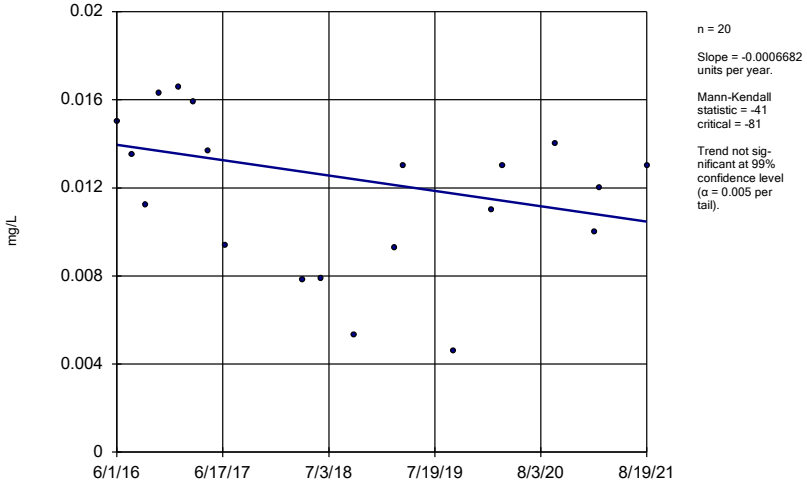
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-1D (bg)



n = 20

Slope = -0.0006682 units per year.

Mann-Kendall statistic = -41
critical = -81

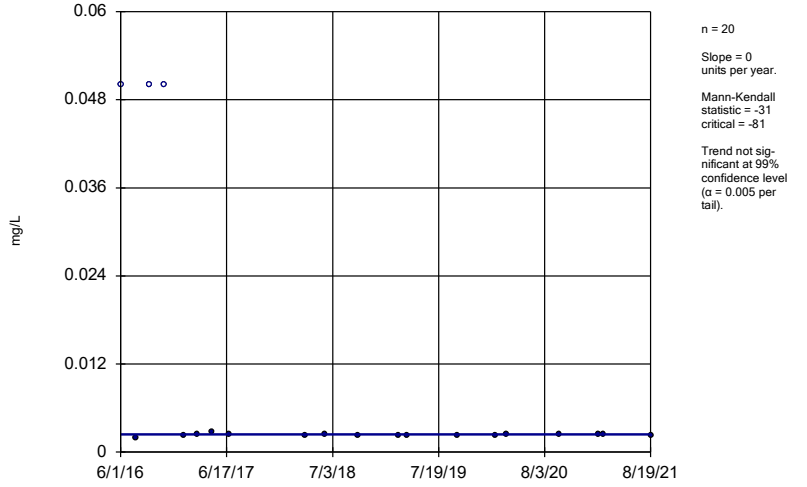
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = -31
critical = -81

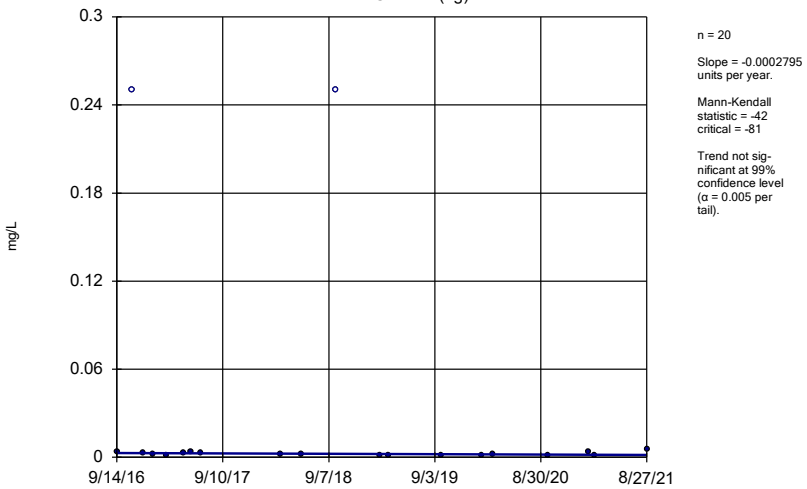
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 20

Slope = -0.0002795 units per year.

Mann-Kendall statistic = -42
critical = -81

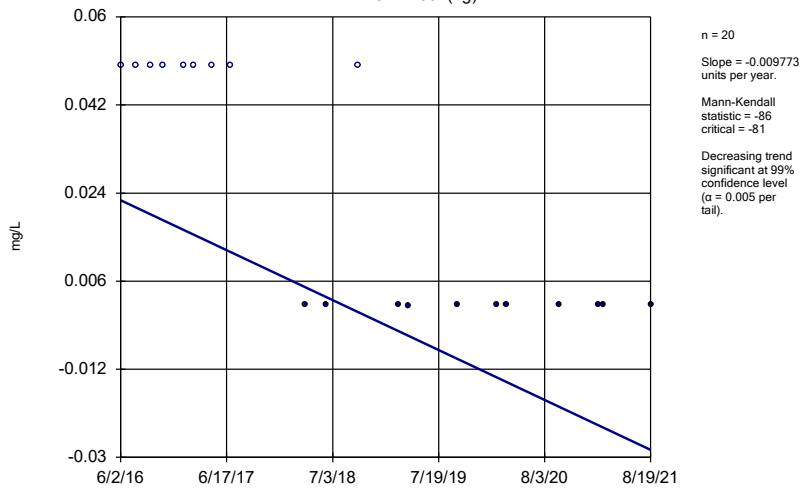
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 20

Slope = -0.009773 units per year.

Mann-Kendall statistic = -86
critical = -81

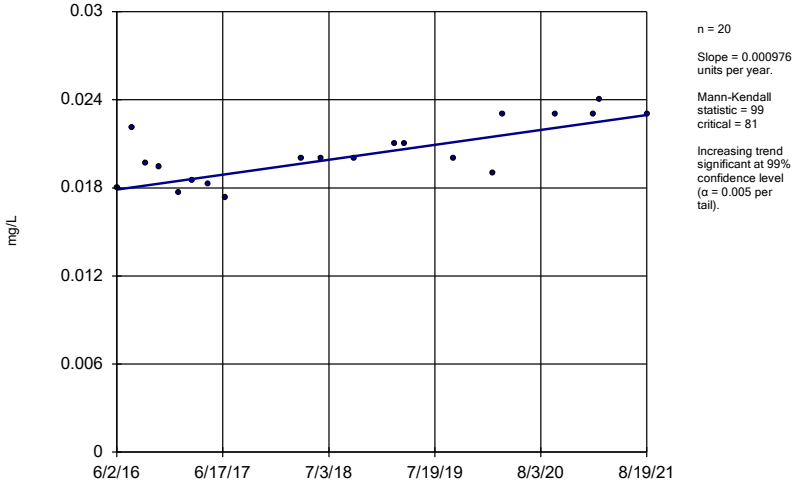
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3D (bg)



n = 20

Slope = 0.000976 units per year.

Mann-Kendall statistic = 99
critical = 81

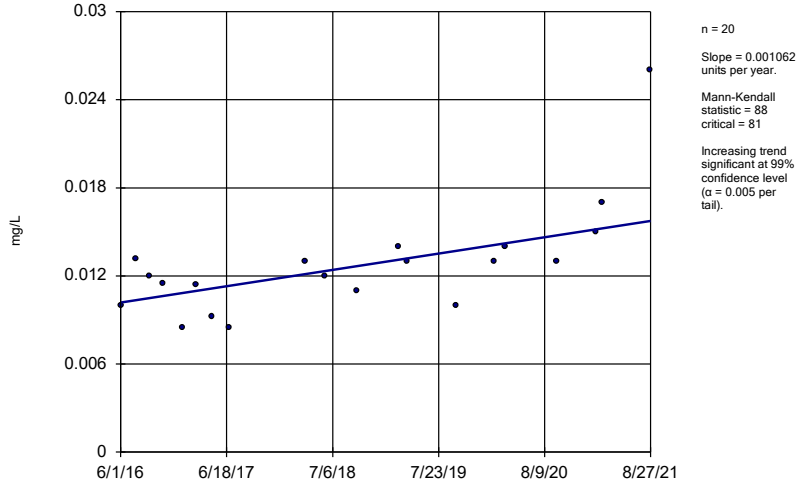
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWA-3I (bg)



n = 20

Slope = 0.001062 units per year.

Mann-Kendall statistic = 88
critical = 81

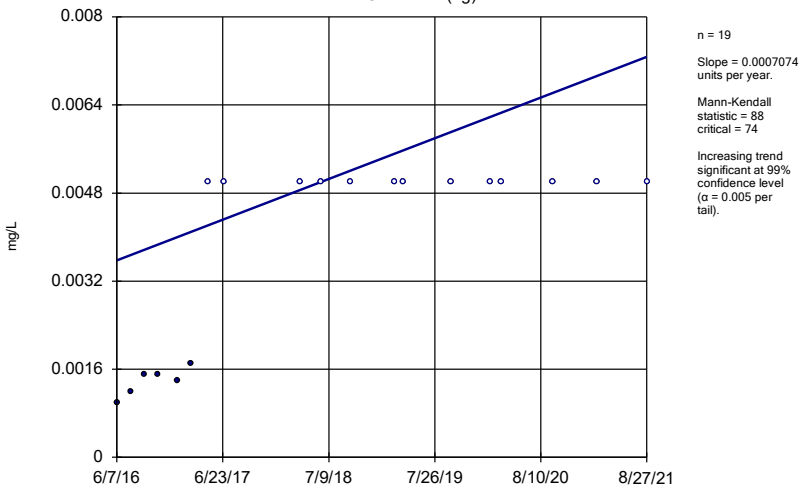
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Lithium Analysis Run 10/29/2021 12:57 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-17S (bg)



n = 19

Slope = 0.0007074 units per year.

Mann-Kendall statistic = 88
critical = 74

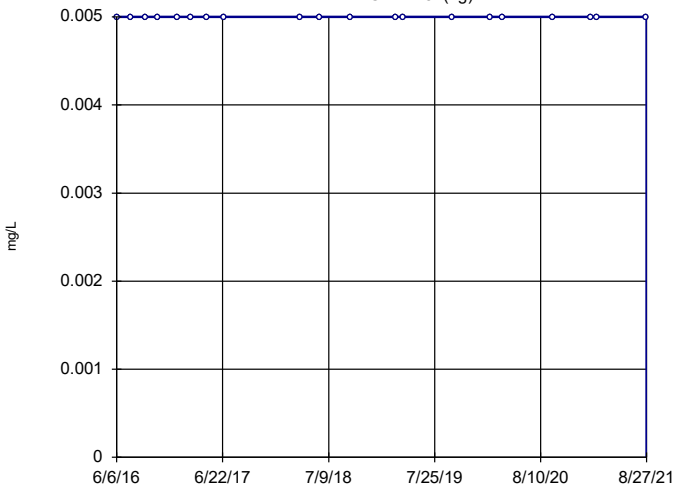
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

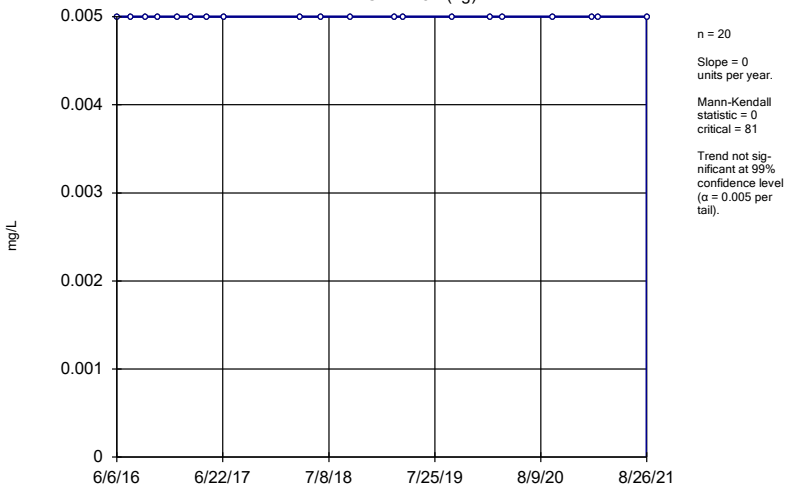
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-18S (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

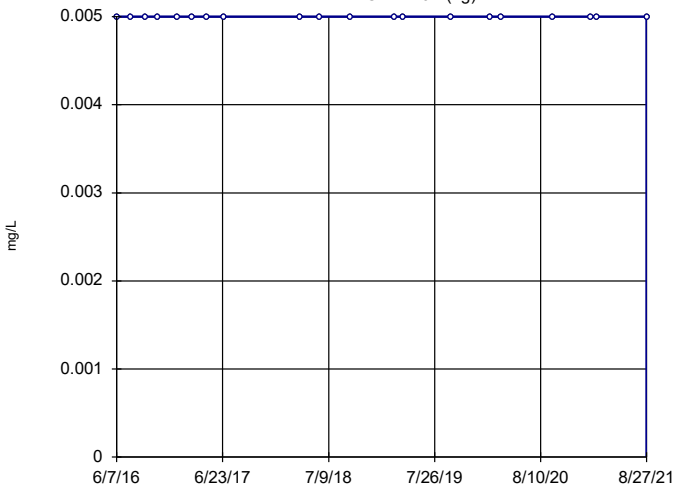
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-20S (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

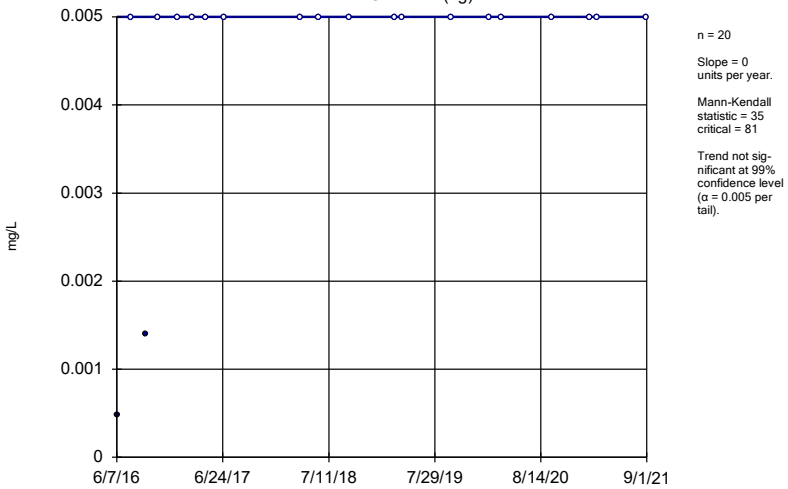
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-21I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 35
critical = 81

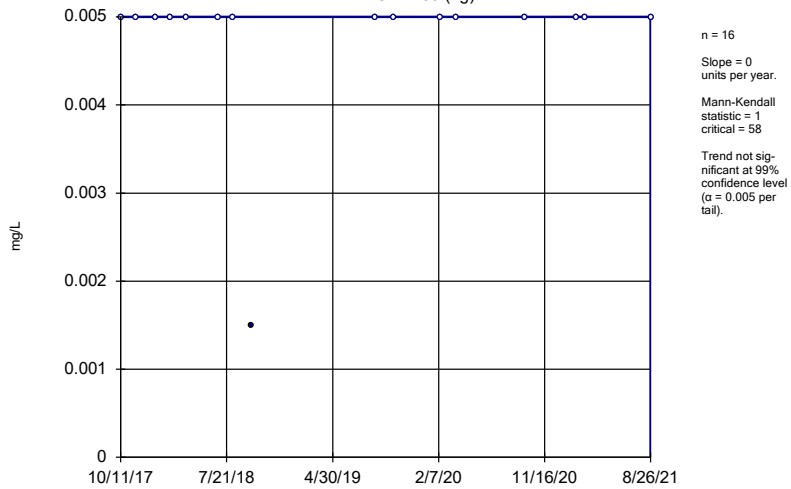
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-39 (bg)



n = 16

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 58

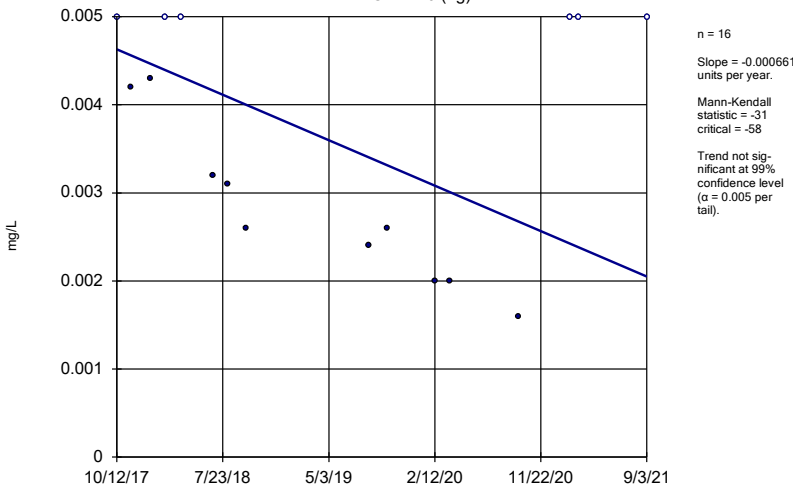
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-40 (bg)



n = 16

Slope = -0.0006615 units per year.

Mann-Kendall statistic = -31
critical = -58

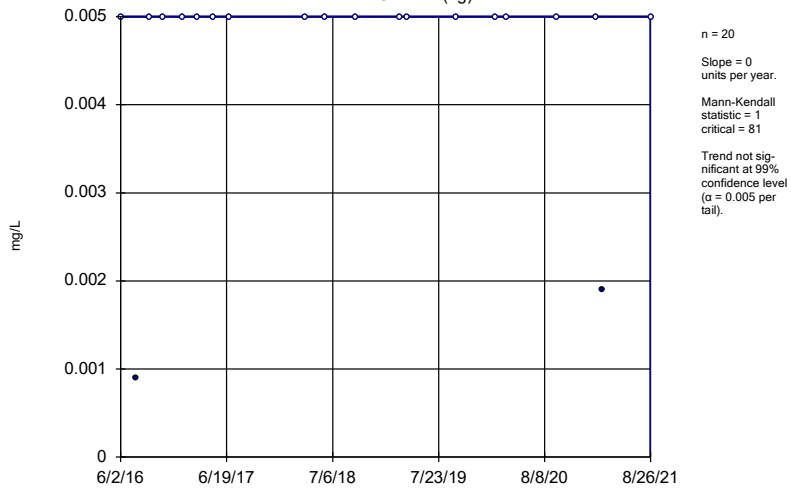
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-4I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 1
critical = 81

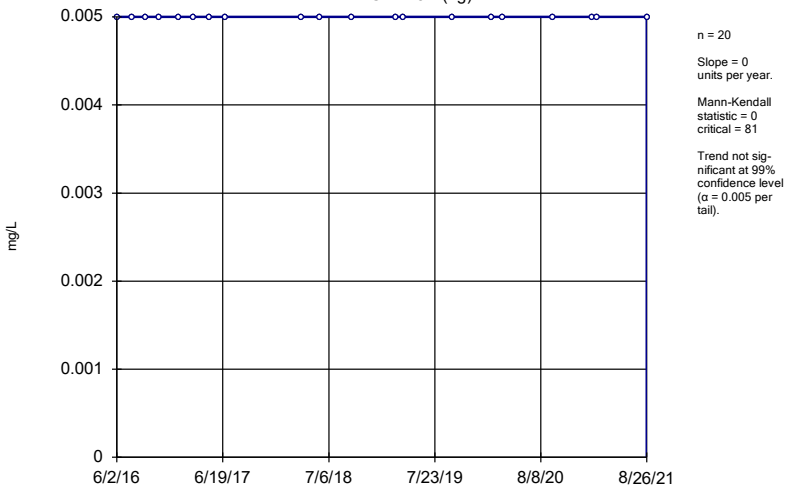
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5D (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 81

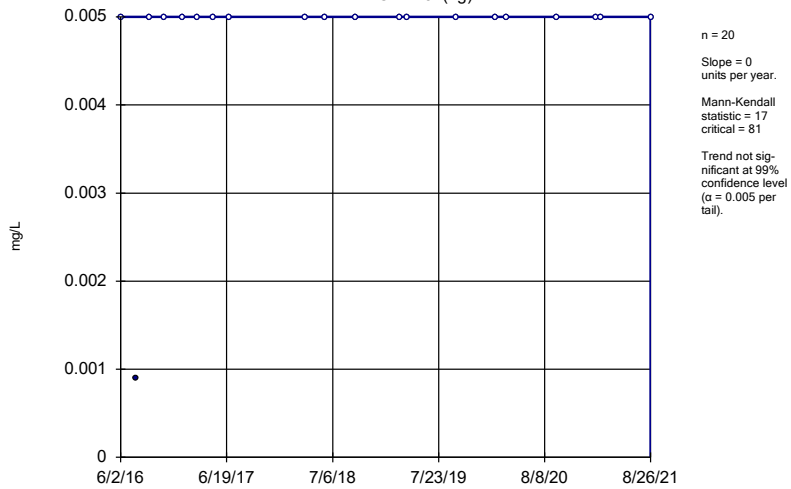
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-5I (bg)



n = 20

Slope = 0 units per year.

Mann-Kendall statistic = 17
critical = 81

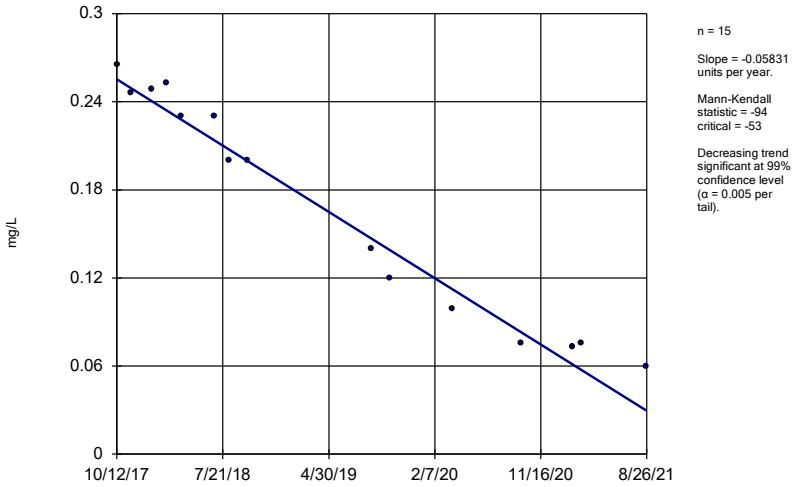
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG

Sen's Slope Estimator

YGWC-38



n = 15

Slope = -0.05831 units per year.

Mann-Kendall statistic = -94
critical = -53

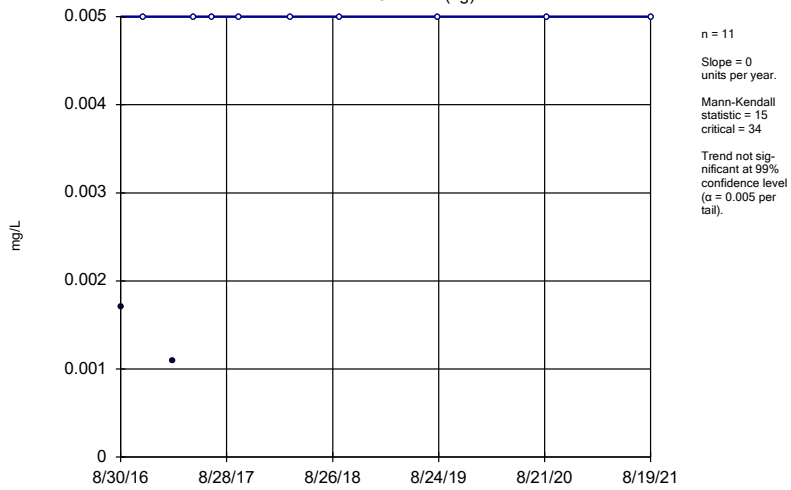
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-47 (bg)



n = 11

Slope = 0 units per year.

Mann-Kendall statistic = 15
critical = 34

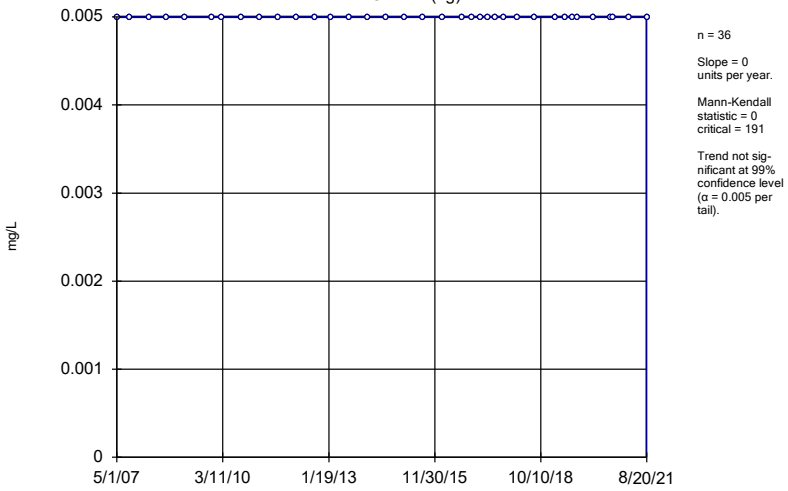
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GWA-2 (bg)



n = 36

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 191

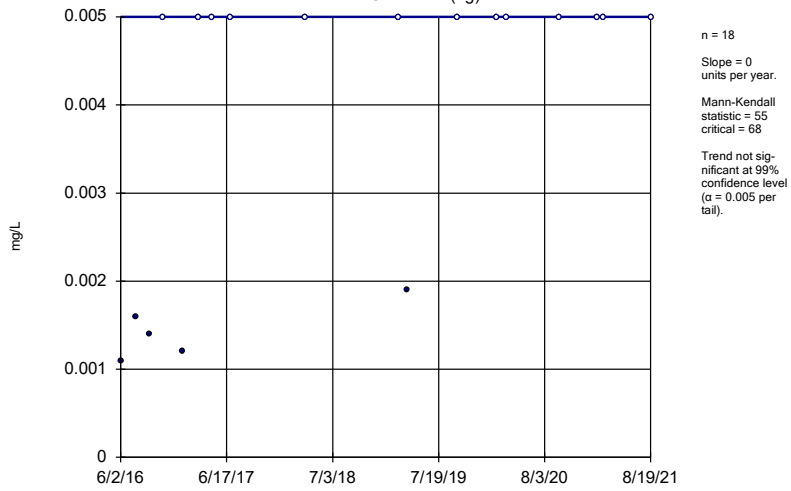
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-14S (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 55
critical = 68

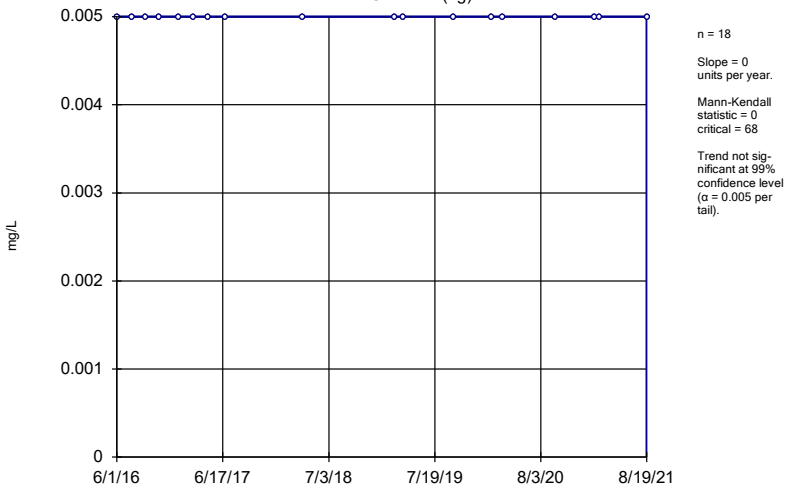
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1D (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

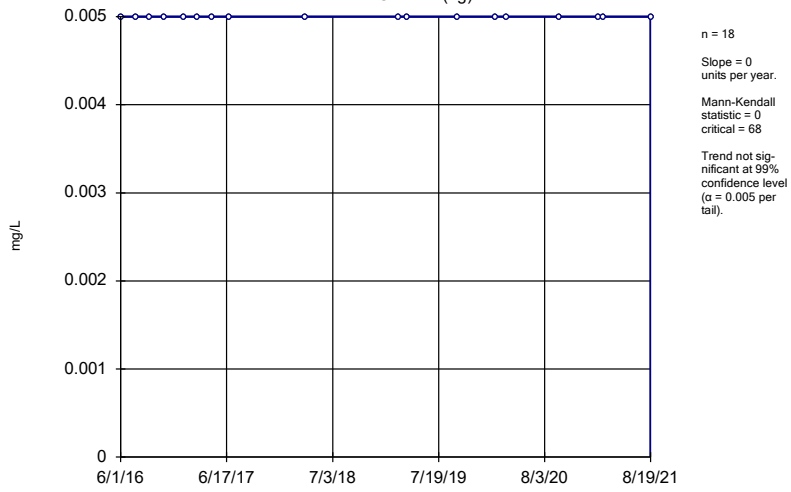
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-1I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 68

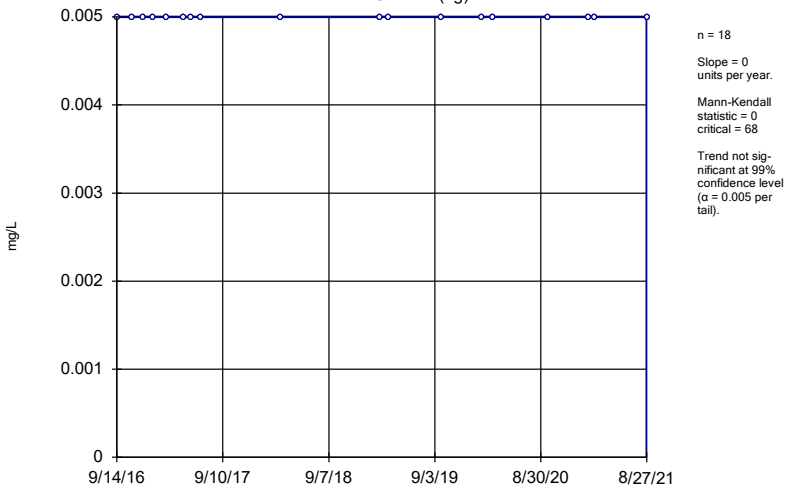
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-2I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 68

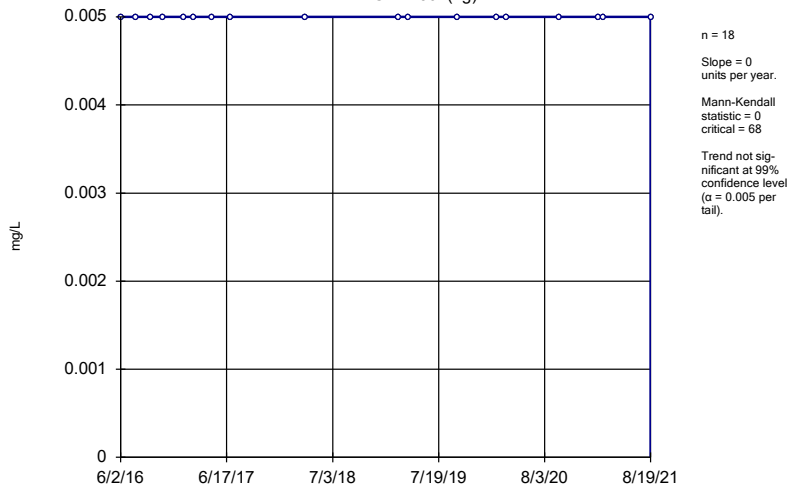
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-30I (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 68

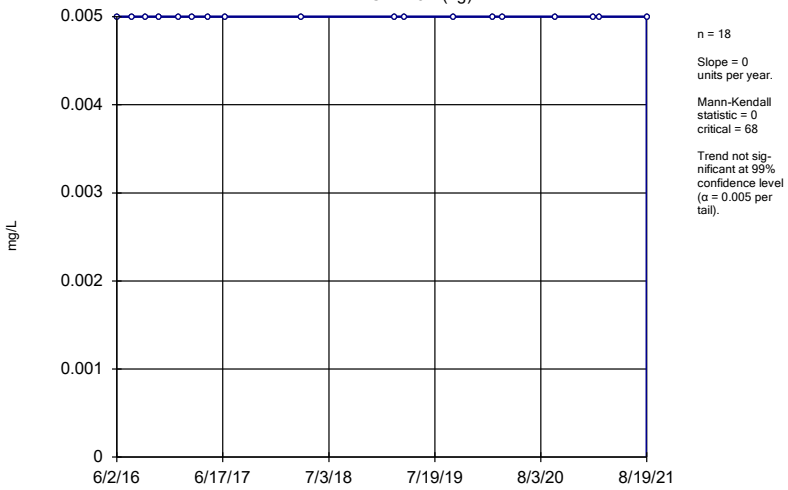
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3D (bg)



n = 18

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 68

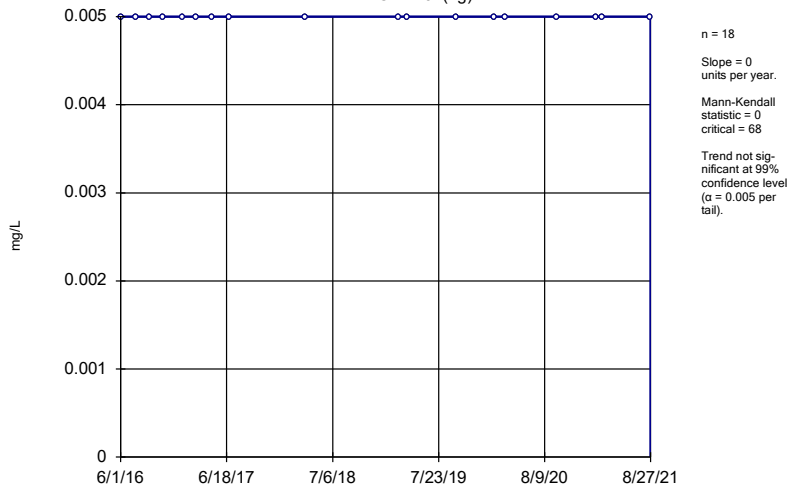
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sanitas™ v.9.6.31 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

YGWA-3I (bg)



n = 18

Slope = 0 units per year.

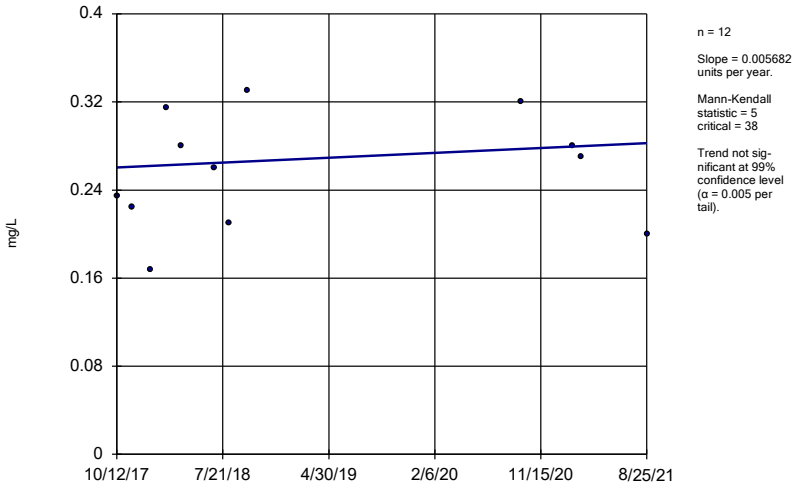
Mann-Kendall statistic = 0 critical = 68

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests
Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

Sen's Slope Estimator

PZ-37



n = 12

Slope = 0.005682 units per year.

Mann-Kendall statistic = 5
critical = 38

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Selenium Analysis Run 10/29/2021 12:58 PM View: Appendix IV Trend Tests

Plant Yates Client: Southern Company Data: Plant Yates AMA-R6

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